```
NamesHAVCKI;
Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88888
                                                                                                                                                                                                                                                                                                                                                                                      043656 homo sapien 095642 homo sapien 095144 ercropithec 01898 ercropithec 07jj48 ercropithec 045597 ercropithec 046597 ercropithec 046598 ercropithec 046598 ercropithec 046598 ercropithec 0900j9 plasmodium 097206 sulfolobus 095299 gallus gall 005199 gallus gall 005199 gallus gallus 095299 enezuelan 05444 rickettsia 0523969 shigella dy 036298 venezuelan 054467 mycoplasma 054467 wenezuelan 077798 venezuelan 077798 venezuelan 097465 dengue viru 06wp63 dengue viru 06wp63 dengue viru 06wp63 dengue viru 06wp63 dengue viru 09wc27 venezuelan 08470 dengue viru 09wc27 venezuelan 08470 dengue viru 09wp63 dengue viru
                                                    June 29, 2005, 08:57:16; Search time 16.833 Seconds (without alignments) 1277.688 Million cell updates/sec
                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                             1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                               1612378
version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                           1612378 segs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                   - protein search, using sw model
                                                                                        US-10-718-321-6_COPY_40_81
225
                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9WC27
Q8JQD9
Q91NH1
GenCore (c) 1993
                                                                                                                                                                                                                                                                 UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                 length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                     %
Query
Match Length I
                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                                                                                  seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein
                                                                                                                                                                                                 Minimum DB
Maximum DB
                                                                                                               Sequence:
                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                  Database
                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                Result
```

Q6wp58 dengue viru Q80kc7 dengue viru Q80f23 venezuelan O36294 venezuelan O36308 venezuelan O36309 venezuelan Q8v5j7 venezuelan Q8v5j7 venezuelan Q9wcf9 venezuelan Q9wcf9 venezuelan Q9wcf9 venezuelan P05674 venezuelan	S AA. ion update) ion update) AA. Yertebrata; Euteleostomi; Hominidae; Homo.	Zhang Y., Kaplan G.G.; a hepatitis A virus cellular 2DC62CA CRC64;	DB 2; Length 359; 8e-20; 10; Indels 0; Gaps 0; SLLTANTTKG 42 	A. update) on update)
2 Q6WP58 2 Q80KC7 2 Q80KC7 2 Q36294 2 Q36294 2 Q36308 2 Q36308 2 Q41997 2 Q8V5J7 2 Q8V5J8 2 Q9WCF9 1 POLS_EEVV8	ALIGNMENT PRT; 359 Created) Last sequenc Last annotat receptor 1. ta; Craniata;	Codes for a code for a co	0%; Score 225; 0%; Pred. No. 2. 0; Mismatchee SSDGLWNNNQTQLFLEHE	PRT; 364 AA. 19, Created) 19, Last sequence update) 28, Last annotation update)
26.0 3392 25.8 558 25.8 559 25.8 559	PRELIMII (TrEMBL: (TrEMBL: (TrEMBL: (TrEMBL: (TrEMBL: (TrEMBL: (TrEMBL: (TrEMBL: Merazoa; Metazoa; Mtheria;)		Similarity 100 2; Conservative PLYSYTDGNDTVTE:	PRELIMINARY; (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	RESULT 1 043656 10 043656 AC 043656 DT 01-UN-1998 (TrE DT 01-MAR-2004 (TrE DT 01-MAR-2004 (TrE DR Hepatitis A viru GN Name=hHAVCr-1; GN Name=hHAVCr-1; CS HOMO SADIONS (MEDS CO MANMALIA; Buther CO NORT TAXID=9606;		Query Match Best Local Si Matches 42, Oy 1 E	RESULT 2 Q9652 1D Q96542 DT Q96542 DT 01-DEC-2001 DT 125-CCT-2004 DT 25-CCT-2004 COMMON PARKEL DECT 2004 COMMON PARKEL DECT 20

```
a receptor for hepatitis A virus.";
                EMBO J. 15:4282-4296(1996).

EMBL, X98252; CAA66906.1; -.

PIR, S71754; S71754.

INTERPRO; IPR0013599; IG.

INTERPRO; IPR00110; IG-like.

INTERPRO; IRR003006; IG_MHC.

SMART; SM00409; IG; 1.

PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cell line.";
                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                   Signal.
                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      018984
                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
018984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     073348
    à
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                    Richards R.L., Peingold E.A., Grouse L.H., Derge J.G.,
Riausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bahat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Biatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Brownstein M., Soarse M.B., Bonaldo M.F., Gasavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Tochhyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Glubbs R.A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
M. Jones S.J., Marra M.A.,
Johes S.J., Marra 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUB-Kidney;
MEDLINE-97015129; PubMed=8861957;
MEDLINE-97015129; Thompson P., Akatsuka T., Moritsugu Y.,
Kaplan G., Totsuka A., Thompson P., Akatsuka T., Moritsugu Y.,
Feinstone S.M.;
"Identification of a surface glycoprotein on African green monkey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.

EBbert L., Schick M., Neubert P., Schatten R., Henze S., Korn B.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

EMBL; BC013325, AAH1325.1, -.

EMBL; CR457114; CA33395.1; -.
                                    TIŠSUE=Kidney;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg R.;
Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PSS0835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN 1.
SEQUENCE 364 AA; 39249 MW; AA67C7DC7FAC81F1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 225; DB 2; ilarity 100.0%; Pred. No. 2.8e-20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              451 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genew; HGNC:17866; HAVCR1.
                                                                                                                                                                                                                                                                                                                                                                                                                            and mouse cDNA sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HAVer-1 protein precursor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
[1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q95144
Q95144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACOSTAL
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Molecular cloning of the hepatitis A virus receptor from a simian
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cercopithecus aethiops (Green monkey) (Grivet).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 460;
                                                                    Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79.1%; Score 178; DB 2; Length 46
81.0%; Pred. No. 3.7e-14;
ive 2; Mismatches 6; Indels
                                                                                                              6; Indels
                                                                                                                                                                                  329 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   338 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQWVNTTEG 379
Potential.
; 5D395C5455AA4332 CRC64;
                                                                                                                                                        1 PLYSYTTDGNDTVTEBSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460 AA; 49687 MW; 1D1A0C1D832139EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                        O18984;
0-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q7JJ48 PRELIMINARY; PRT; 469 AA.
Q7JJ48;
O5-JUL-2004 (TrEMBLrel. 27, Created)
O5-JUL-2004 (TrEMBLrel. 27, Last sequence update)
O5-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hepatitis A virus cellular receptor 1 short form.
                                                               Score 178; DB 2;
Pred. No. 3.6e-14;
2: Mismatches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cercopithecus aethiops (Green monkey) (Grivet).
                                                                                                                                                                                                                                                                                                                   460 AA.
                                                                                                                                                                                                                                                                SEQ IDINO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Gen. Virol. 78:1565-1569(1997).

BRML, D88565; BAA21556.1; -.

GO, GO:0004872; F:receptor activity; IEA.
InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR00306; Ig_MHC.
SWART; SM00409; IG; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMART; SM00409; IG; 1. _
PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=97368416; PubMed=9225030;
Ashida M., Hamada C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cercopithecinae; rimates; C. Cercopithecus. NCBL TaxID=9534;
                       451 AA; 48774 MW;
                                                                    79.1%; S
                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis A virus receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 81.0 es 34; Conservative
                                                                                                              34; Conservative
                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEBTTAR
```

```
Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        046598
                                                                           046597
                              RESULT 7
046597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
046598
                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          욥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                   MEDLINE=98265791; PubMed=9621093; Rejgelstock D., Thompson P., Mattoo P., Kaplan G.G.; Feigelstock G.G.; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE=98285791; PubMed=9621093;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Follymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cercopithecus aethiops (Green monkey) (Grivet).

Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;

Cercopithecinae; Cercopithecus.
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79.1%; Score 178; DB 2; Length 469; 81.0%; Pred. No. 3.7e-14; Live 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79.1%; Score 178; DB 2; Length 473; 81.0%; Pred. No. 3.8e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  347 PLYSYTTDGSDTVTESSDGLWNNQTQLGPEHSPQMVNTTEG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     351 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    469 AA; 50561 MW; 27E386F47948F528 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE 473 AA; 50973 MW; CD15EF5EE79C8013 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update) Hepatitis A virus cellular receptor 1 short form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      473 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AF043448; AAC39773.1; -.
GO; GO:0004872; F:receptor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR003599; IG.
InterPro; IPR007110; IG-11ke.
InterPro; IPR00306; IG_MHC.
SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel. 27, C
(TrEMBLrel. 27, I
(TrEMBLrel. 27, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                     SEQUENCE FROM N.A.
                                                                           NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             073347;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   973347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
WEDUINE-98285791; PubMed-9621093;
WEDUINE-98285791; PubMed-9621093;
WEDUINE-98285791; PubMed-9621093;
WEDUINE-98285791; PubMed-9621093;
The Pedgelstock D., Thompson P., Mattoo P., Kaplan G.G.;
The Prolymorphisms of the hepatitis A virus callular receptor 1 in African Transported with protective monoclonal antigenic variants that do not transported with protective monoclonal antibody 190/4.";
The Reservative monoclonal antibody 190/4.";
The Processor of the Accidence of the Acci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-98285791; PubMed-9621093; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=HAVCr-1;
Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                 Cermopitheous aethiops (Green monkey) (Grivet).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 474;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 79.1%; Score 178; DB 2; Length 47 Best Local Similarity 81.0%; Pred. No. 3.8e-14; Matches 34; Conservative 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        352 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               474 AA; 51088 MW; 472DF987CA220524 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                        Hepatitis A virus cellular receptor 1 long form
     474 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      478 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. Virol. 72:6218-6222(1998).
EMBL; AF043447; AAC39772.1; -.
GO; GO:0004872; F:receptor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                01-JUN-1998 (TrEMBLrel. 06, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                     (TrEMBLrel. 06, (TrEMBLrel. 06,
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DRAR REPRENCE OCCUPATION OF THE PROPERTY OF TH
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                       Q9U0J9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90ZL60
                                                                                                               RESULT 10
Q9U0J9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          097206
                                                                              g
                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OS GE DAY
                                                          ઠે
                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swies Institute of Bioinformatics and the BMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ibsib.ch).
                                                                                                                                                                                                                                                                                                                        MEDLINE=94378003; PubMed=8091229;
Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Dover J.,
Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Dover J.,
Kucaba T., Hillier L.W., Jier M., Johnston L., Langston Y.,
Latreille P., Louis E.J., Macri C., Mardis E., Menezes S., Mouser L.,
Nhan M., Rifkin L., Riles L., St Peter H., Trevaskis E., Vaughan K.,
Vignati D., Wilcox L., Mohldman P., Waterston R., Wilson R.,
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        "Complete nucleotide sequence of Saccharomyces cerevisiae chromosome
                                                                                                                                                                                                                                          Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                          ö
                                                                                                                                                                                               01-FEB-1995 (Rel. 31, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Hypothetical 71.9 kDa protein in ERPS-ORC6 intergenic region.
                                   Length 478;
                                                       Indels
                                                                                            356 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 397
                                                                               1 PLYSYTIDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
            478 AA; 51501 MW; 3A919655C752FF60 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B4AD583BB6CB466B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSSP; P31946; IELW.
GermOnline; 139444; ...
SGD; S000001159; TOM71.
GO; GO:0005741; C:mitochondrial outer membrane; IDA.
GO; GO:0005578; F:protein transporter activity; IPI.
InterPro; IPR001440; TPR-like.
                                Score 178; DB 2;
Pred. No. 3.8e-14;
2; Mismatches 6;
                                                                                                                                                              639 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TPR repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Science 265:2077-2082(1994).
-!- SIMILARITY: Contains 9 TPR repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TPR 1.
TPR 2.
TPR 4.
TPR 5.
TPR 6.
TPR 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00515; TPR; 8.
SWART; SW00028; TPR; 7.
PROSITE; PS50005; TPR, 7.
PROSITE; PS50293; TPR REGION; 2.
Hypothetical protein; Repeat; TP
                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71856 MW;
                                 79.1%;
81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; U00059; AAB68868.1; -. PIR; S48959; S48959.
                                                                                                                                                                                                                                  OrderedLocusNames=YHR117W;
                                                        Conservative
                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein;
REPEAT 127 160
                                                                                                                                                                                                                                                                                                                  STRAIN=S288c / AB972;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  565 !
639 AA;
                                            Similarity
                                                                                                                                                                                     01-FEB-1995 (Rel.
                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                               NCBI_TaxID=4932;
                                    Ma.
Local S.
34;
                                                                                                                                                  YHR7_YEAST
ID YHR7_YEAST
AC P38825;
Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
SEQUENCE
                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REPEAT
                                                        Matches
                                                                                                                                        RESULT 9
                                                                                                                                                              셤
```

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-22255708; PubMed=12368867; DOI=10.1038/nature01095;
Hall N., Pain A., Berriman M., Churcher C., Harris B., Harris D.,
Mungall K., Bowman S., Atkin R., Baker S., Barron A., Brooks K.,
Mungall K., Bowman S., Cherevach I., Chillingworth C.,
Chillingworth T., Christodoulou Z., Clark L., Clark R., Corton C.,
Croin A., Davies R., Davis P., Dear P., Dearden F., Doggett J.,
Reltwell T., Goble A., Goodhead I., Gwilliam R., Hamlin N., Hance Z.,
Humphray S., Jagels K., James K.D., Johnson D., Kerhornou A.,
Knights A., Konfortov B., Kyes S., Larke N., Lawson D., Lennard N.,
Line A., Maddison M., Mclean J., Mooney P., Moule S., Murphy L.,
Oliver K., Ormond D., Price C., Quail M.A., Rabbinowitsch E.,
Rajandream M.A., Rutter S., Rutherford K.M., Sanders M., Simmonds M.,
Seeger K., Sharp S., Smith R., Squares S., Stevens K.,
Taylor K., Tivey A., Unewbold C., Barrell B.G;
Sulston J.E., Craig A., Newbold C., Barrell B.G;
"Sequence of Plasandium falciparum chromosomes 1, 3-9 and 13.";
                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Archaea; Crenarchaeota; Thermoprotei; Sulfolobales; Sulfolobaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
     DB 1; Length 639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Plasmodium falciparum (isolate 3D7).
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 62; DB 2; Length 842;
Pred. No. 46;
                                                       4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Mismatches 18; Indels
                                                                                                                                 2 LYSYTTDG----NDTVTESSDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .1 protein.
842 AA; 94515 MW; B6C7FA0EF9B956C7 CRC64;
                                                                                                                                                                                                                                                                                                                                01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2003 (TrEMBLrel. 25, Last annotation update)
Hypothetical protein PFD0430c.
Name-PFD0430c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          143 SSSNDNNDEENEEQDDVMDNDQNDKXIXHSFNLANESK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 SYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTK 41
                                                                                                                                                                                                                                                                                     842 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 1269 AA.
                                                    6; Mismatches
                             29;
     Score 62.5;
                             Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                     PRT;
27.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27.6%;
34.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 097206;
01-OCT-2001 (TrEMBLrel. 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-2001 (TrEMBLrel. 18, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OrderedLocusNames=SSO1141;
Sulfolobus solfataricus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protease related protein.
                             Best Local Similarity 40.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nature 419:527-531(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l Similarity
13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=36329;
```

```
EMBL; AF004472; AAC71997.2; -. HSSP; P05674; 1RP5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27.1%;
47.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00798; TOGAVIRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 47.69
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OrderedLocusNames=RB4375;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polyprotein
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Complete p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    070500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             070800
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DO BENERAL SERVICE OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                       SECUENCE FROM N.A.

STRAIN=ATCC 35092 / DSM 1617 / P2;

STRAIN=ATCC 35092 / DSM 1617 / P2;

STRAIN=21312296; PubMed=11427726; DOI=10.1073/pnas.141222098;

She Q., Singh R.K., Confalonieri F., Zivanovic Y., Allard G.,

Awayez M.J., Chan-Weiher C.C.-Y., Clausen I.G., Curtis B.A.,

De Moors A., Brauso G., Fletcher C., Gordon P.M.K.,

Heikamp-de Jong I., Jeffries A.C., Kozera C.J., Medina N., Peng X.,

Thi-Ngoc H.P., Redder P., Schenk M.E., Theriault C., Tolstrup N.,

Charlebois R.L., Doolittle W.F., Duguet M., Gaasterland T.,

Charlebois R.L., Sensen C.W., Van der Oost J.;

"The complete genome of the crenarchaeon Sulfolobus solfataricus P2.";

Proc. Natl. Acad. Sci. U.S.A. 98:7835-7840(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wang E., Barrera R., Boshell J., Ferro C., Freier J.E., Navarro J.C., Salas R., Vasquez C., Weaver S.C.;
"Genetic and phenotypic changes accompanying the emergence of epizootic subtype IC Venezuelan equine encephalitis viruses from an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=97404681; PubMed=9261393;
Powers A.M., Oberste M.S., Brault A.C., Rico-Hesse R., Schmura S.M., Smith J.F., Kang W., Sweeney W.P., Waaver S.C.;
Repeated emergence of epidemic/epizootic Venezuelan equine encephalitis from a single genotype of enzootic subtype ID virus.";
J. Virol. 71:6697-6705(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Structural polyprotein.
Venezuelan equine encephalitis virus.
Viruses; sRRNA positive-estrand viruses, no DNA stage; Togaviridae;
Alphavirus; VEEV complex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 SYTTDG------NDTVTE-SSDGLWNNNQTQLFLEHSLLTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27.3%; Score 61.5; DB 2; Length 1 34.0%; Pred. No. 85; ive 7; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1269 AA; 138027 MW; 87C8F05CCF83DA84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN=66637, and 66457;
Wang E., Weaver S.C.;
Submitted (UUL-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF0004458; AAC71187.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR; A90267; A90267.

GO; GO:0004233; F:peptidase activity; IEA.

GO; GO:0004289; F:subtilase activity; IEA.

GO; GO:0004289; F:proteolysis and peptidolysis; IEA.

InterPro; IPR0001611; LRR.

InterPro; IPR00029; Pept S8 S53.

PRINTS; PR00019; LEURICHRPT.

PROSITE; PG00138; SUBTILASE SER; 1.

Complete proteome; Protease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-1998 (TrEMBLrel. 05, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT; 1255 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN-66637, and 66457;
MEDLINE-99214366; PubMed=10196323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       enzootic subtype ID progenitor.";
J. Virol. 73:4266-4271(1999).
[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 34.0
nes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=11036;
                            NCBI_TaxID=2287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       036287; 036301;
  Sulfolobus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           036287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDTTDDT
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-2735913; PubMed=12835416; DOI=10.1073/pnas.143100; Gloeckner F.O., Kube M., Bauer M., Teeling H., Lombardot T., Ludwig W., Gade D., Beck A., Borzym K., Heitmann K., Rabus R., Schlesner H., Amann R., Reinhardt R.; Complete genome sequence of the marine planctomycete Pirellula sp. strain 1."; Proc. Natl. Acad. Sci. U.S.A. 100:8298-8303(2003).

EMBL, BX294140; CAD73746.1; --
EMBL, Cintegral to membrane; IEA.
GO, GO:001621; Cintegral to membrane; IEA.
GO, GO:0007154; P:cell communication; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
R GO; GO:0016020; C:semebrane; IEA.

R GO; GO:0015028; C:viral capsid; IEA.

GO; GO:0019028; C:viral capsid; IEA.

GO; GO:0019028; C:viral envelope; IEA.

R GO; GO:0004252; F:serine-type endopeptidase activity; IEA.

GO; GO:0005198; F:structural molecule activity; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

R GO; GO:0005198; F:structural molecule activity; IEA.

R InterPro; IPR002548; Alpha E1_glycop.

R InterPro; IPR000548; Alpha E2_glycop.

R InterPro; IPR000356; Alpha E3_glycop.

R InterPro; IPR000306; Peptidase S3.

InterPro; IPR000903; Peptidase S3.

R Pfam; PF00944; '.hha_core; 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rhodopirellula baltica.
Bacteria; Planctomycetes; Planctomycetacia; Planctomycetales;
Planctomycetaceae; Pirellula.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 61; DB 2; Length 1255;
Pred. No. 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1255 AA; 138339 MW; 799350E33C807EAA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3056 AA; 296490 MW; A305EF22F431BF67 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-07T-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT; 3056 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00144; ASN_GLN_ASE_1; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR006034; Asp/Glutamnse. InterPro; IPR006034; Asp/Glutamnse. InterPro; IPR003644; Calx_beta. InterPro; IPR003644; Calx_beta. InterPro; IPR003105; Dockerin_I. InterPro; IPR001050; PbH1. InterPro; IPR01050; Pectin_Iyas_like. InterPro; IPR011050; Planc_extracel. Ffam; PF02415; Chlam PMP; 59. Ffam; PF02415; Chlam PMP; 59. Ffam; PF07595; Planc_extracel; I. Phan; PF07595; Planc_extracel; I. Phan; PF07595; Planc_extracel; I. Phan; PF07595; Planc_extracel; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00944; Alpha core; 1.
Pfam; PF01589; Alpha El glycop; 1.
Pfam; PF00943; Alpha E2 glycop; 1.
Pfam; PF01563; Alpha E3 glycop; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probable extracellular nuclease.
```

ö

```
..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Neuron 20:255-270(1998).

-I-FUNCTION: Direct ligand for the ERBB tyrosine kinase receptors.

-I-FUNCTION: Direct ligand for the ERBB tyrosine kinase receptors.

The multiple isoforms perform diverse functions: cysteine-rich domain containing isoforms (isoforms 2-4) probably regulate the expression of nicotinic acetylcholine receptors at developing interneuronal synapses. The Ig-NRG isoform is required for the intial induction and/or maintenance of the mature levels of acetylcholine receptors at neuromuscular synapses.

-I-SUBCELLULAR LOCATION: Exists as a type I membrane protein and as a proteolytically released soluble growth factor form. The membrane-bound form does not seem to be active (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=White leghorn; TISSUE=Brain; MEDLINE=93201602; PubMed=8453670; DOI=10.1016/0092-8674(93)90407-H; Falls D.L., Rosen K.M., Corfas G., Lane W.S., Fischbach G.D.; "ARIA, a protein that stimulates acetylcholine receptor synthesis, is a member of the neu ligand family."; cell 72:801-815(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isold=Q05199-1; Sequence=Displayed;
Note=Contains an Ig-like domain;
Name=2; Synonyms=CRD-NRG-BETAIA;
Name2; Synonyms=CRD-NRG-BETAIA;
Name2=005199-2; Sequence=VSP 003445;
Note=The EGF-like domain is Feplaced by a cysteine-rich domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. (ISOFORMS 2; 3 AND 4).

TISSUE=Brain, and Spinal cord;

MEDLINE=98150951; PubMed=9491987; DOI=10.1016/S0896-6273(00)80454-7;

Yang X., Kuo Y., Devy P., Yu C., Role L.;

"A cysteine-rich isoform of neuregulin controls the level of expression of neuronal nicotinic receptor channels during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IsoId=Q05199-3; Sequence=VSP 003445, VSP 003446;
Note=The EGF-like domain is replaced by a cysteine-rich domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note=The EGF-like domain is replaced by a cysteine-rich domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEVELOPMENTAL STAGE: Isoforms 2-4 are detected at embryonic day (ED4) in both visceral and somatic motor neurons of spinal cord and is highest at ED6. Isoform 1 is not expressed until ED 6 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IsoId=Q05199-4; Sequence=VSP_003445, VSP_003446, VSP_003447, VSP_003448;
                                            14; Indels 11;
                                                                                                                                                                                                                            NRGI CHICK STANDARD; PRT; 602 AA.

005199; 073750; 073751; 073752;
16-072-2001 (Rel. 40, Created)
16-072-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Pro-neuregulin-1 precursor (Pro-NRG1) [Contains: Neuregulin-1 (Acetylcholine receptor inducing activity) (ARIA)].
Name=NRG1; Synonyma=ARIA;
Gallus gallus (Chicken).
    DB 2; Length 3056;
                                                                                                               306 DGNADISGGTIRDNTAAREGGGLWNNTGT-MIVDGTILTGNVASG 349
                                                                                      8 DGN------DIVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. (ISOFORM 1), AND PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Event=Alternative splicing; Named isoforms=4;
Comment=Additional isoforms seem to exist;
Name=1; Synonyms=ARIA, IG-NRG;
Score 60.5; DB 2;
Pred. No. 3.1e+02;
6; Mismatches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synonyms=CRD-NRG-BETA2A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synonyme=CRD-NRG-BETA2B;
  26.9%;
                        31.18;
                                            14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALTERNATIVE PRODUCTS:
                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synaptogenesis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CRD);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name=3;
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus.
                                                                                                                                                                                                 RESULT 14
NRG1_CHICK
                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -
                                                                                                                                                                                                                                           유
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib.ch):
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LITETETET 1 INTO 1110; 110.

BY INTERPROST 197.

BY INTERPROST 197.

BY PRONOUT 1 197.

BY PEAN; PRO1089; NEUREGULIN.

BY PRANT; SP001089; NEUREGULIN.

BY RARKT; SMO0184; RGF, 1 1.

BY ROSITE; PS00022; BGF, 1 1.

BY ROSITE; PS00022; BGF, 1 1.

BY ROSITE; PS00025; BGF, 1 1.

BY ROSITE; PS00026; BGF, 2; FALSE_NEG.

BY ROSITE; PS00026; BGF, 2; PALSE_NEG.

BY ROSITE; 
                  DOMAIN: The cytoplasmic domain may be involved in the regulation of trafficking and proteolytic processing. Regulation of the proteolytic processing involves initial intracellular domain dimerization (By similarity).

DOMAIN: ERBB receptor binding is elicited entirely by the EGF-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-linked (GlcnAc. .) (Potential).
MWATSEGPLQYSLAPTQTDVNSSYNTVPPKLKEMKNQEVAV
GQKLVLRCETTSEYPALRFKWLKNGKEITKKNRPENVKIPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STVDPTALSAWVPSEVYASPPPIPSLESKAEVTVQTDSSLV
PSRPFLQPSLYNRILDVGLWSSATPSLSPSSLEPTTASQAQ
ATETNLQTAPKLS (in isoform 2, isoform 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KÖKKYSELHIYRATLADAGEYACRVSSKLGNDSTKASVIIT
DTNA -> MSEVGTETFPSPSAQLSPDASLGGLPAEENMPG
PHREDSRVPGVAGLASTCCYCLEAERLKGCLNSEKICIAPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LACLLSLCLCIAGLKWVFVDKIFEYDSPTHLDPGRIGQDPR
                                                                                                                                                                                                                                                    PTM: Extensive glycosylation precedes the proteolytic cleavage (By
                                                                                                                                                                       PTM: Proteolytic cleavage close to the plasma membrane on the external face leads to the release of the soluble growth factor
cord. At ED 11 both isoforms display comparable levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       By similarity.
By similarity.
By similarity.
By similarity.
N'linked (GlCNAc. ..) (Potential).
N'linked (GlCNAc. ..) (Potential).
N'linked (GlCNAc. ..) (Potential).
                                                                                                                                                                                                                                                                                                SIMILARITY: Belongs to the neuregulin family.
SIMILARITY: Contains 1 EGF-like domain.
SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; L11264; AAA49037.1; -.
EMBL; AF045654; AAC05670.1; -.
EMBL; AF045655; AAC05671.1; -.
EMBL; AF045656; AAC05672.1; -.
PIR; A45769; A45769.
HSSP; Q12780; IHRE.
InterPro; IPR006742; EGF_2.
InterPro; IPR006210; EGF_Ike.
InterPro; IPR006210; IEGF_I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     205
2206
2206
2209
220
230
231
231
231
231
231
231
231
231
231
                                                                                                                                                                                                                                                                           similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
```

and isoform 4). /FIId=VSP_003445.

```
ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

STRAIN=Karp;

Yun J.-H., Koh Y.-S., Kim S.-J.;

Wan Jolevular cloning of the superoxide dismutase gene from Orientia tsutsugamushi, the causative agent of scrub typhus.";

J. Microbiol. 40.151-155(2002).

-!- FUNCTION: Destroys radicals which are normally produced within the cells and which are toxic to biological systems (By similarity).

-!- CATALYTIC ACTIVITY: 2 superoxide + 2 H(+) = O(2) + H(2)O(2).

-!- SIMILARITY: Belongs to the iron/manganese superoxide dismutase
                             /FTIG=VSP 003446.
VSAMTTPARMSPVDFHTP -> HTPPTSLLLAGKVSLRVS
                                                                                                                                                                                                                                                                                                                                                     Gapa
Missing (in isoform 3 and isoform 4).
                                                                                                                                                                                                                                                                                                                                                     ;
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacteria, Proteobacteria; Alphaproteobacteria, Rickettsiales;
Rickettsiaceae; Rickettsieae; Orientia.
NCBI_TaxID=784;
                                                                                                                                                                                                                                                                             / Match 26.7%; Score 60; DB 1; Length 602; Local Similarity 31.7%; Pred. No. 56; nes 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26.2%; Score 59; DB 2; Length 142; lilarity 30.0%; Pred. No. 15; Conservative 9; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF484107; AAQ05969.1; -.
HSSP; P04179; 1AP6.
GO; GO:0046872; F:metal ion binding; IEA.
GO; GO:0016491; F:xidoreductase activity; IEA.
GO; GO:0006801; P:superoxide dismutase activity; IEA.
GO; GO:0006801; P:superoxide metabolism; IEA.
InterPro; IPR001189; SODismutase.
R Pfam; PR002177; Sod Fe_C; 1.
R Pfam; PR00081; Sod Fe_C; 1.
R Pfam; PR00081; Sod Fe_N; 1.
R ProDom; P0000475; SODismutase; 1.
                                                                                        (in isoform 4).
/FTIGE-VSP 003447.
602 Missing (in isoform 4).
/FTIGE-VSP 003448.
67453 MW; 4183COE56CE5D346 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1
142 AA; 16422 MW; 0D021A66AB6EA861 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 YISTITHHSMIVTQTPSHSWSNGHTESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                                                                                            3 YSYTTDGNDTVTESSDGLWNNNOTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Superoxide dismutase (Fragment). Rickettsia tsutsugamushi.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUL-2004 (TrEMBLrel.
                                                              405
198
                                                                                                                                                      602
                                                                                                                                                                                                                     602 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
nes 12; Conserv
                                                                                                                                                      406
191
                                                              388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oxidoreductase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
SEQUENCE
VARSPLIC
                                                              VARSPLIC
                                                                                                                                                      VARSPLIC
                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q6KFY4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q6KFY4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15

OS KFY4

ID OS - VI

DT OS - VI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                 Matches
rr
rr
rr
rr
s
S
                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
```

2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTK 41 LISFNCEGSKAIFNNAAQIWNHN----FFWHSICNNNATK 68 ઠે

1;

Gaps

4 ;

Search completed: June 29, 2005, 09:01:43 Job time: 17.833 secs

COLORD AND THE YORK SILL

Sequence Sequence

Sequence 269343, Sequence 328576, Sequence 333914, Sequence 29, Appl Sequence 264025, Sequence 16, Appl Sequence 6, Appl Sequence 6, Appl Sequence 5, Appl Sequence 5, Appl Sequence 56, Appl Sequence 75, Appl Sequence 75, Appl Sequence 1730, Appl Sequence 275, Appl Sequence 275, Appl Sequence 275, Appl Sequence 275, Appl Sequence 200490, Sequence 20193, Sequence 221027, Sequence 147220, Sequence 22102, Sequence 324897,

Sequence 2, Sequence 2,

Run on:

```
Sequence 1, Application US/10718321

Sequence 1, Application US/10718321

SENBEAL INFORMATION:
APPLICANT: Biogen Idec Ma Inc.
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bonventre, Joseph
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Molecules and Methods for Inhibiting
FILE REPERENCE: A124 US
CURRENT APPLICATION UNMBER: US/10/718,321
CURRENT FILING DATE: 2001-06-01
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 8
SOFTWARR: PASLEGO for Windows Version 4.0
Query Match
44.0%; Score 99; DB 17; L
Best Local Similarity 100.0%; Pred. No. 2.2e-06;
Matches 18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                  US-10-121-799-2
US-10-404-626-2
US-11-033-209-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33
     16 SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo Sapiens
  US-10-718-321-1
                                                                                                    40.5
                                                                                                                                                                                                       SEQ ID NO 1
   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 282496,
Sequence 240616,
Sequence 210616,
Sequence 284397,
Sequence 166786,
Sequence 1031, Ap
Sequence 11931,
Sequence 216152,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Appli
Sequence 190016,
                                                                                       June 29, 2005, 09:46:27; Search time 25.4145 Seconds (without alignments) 635.503 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                       US-10-718-321-6_COPY_40_81
225
1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                     Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB_pep:*

4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB_pep:*

4: /cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB_pep:*

6: /cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB_pep:*

7: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB_pep:*

8: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB_pep:*

9: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
                                                                                                                                                                                                                                                          487488
               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 US-10-718-321-1

5 US-10-424-599-190016

5 US-10-424-599-282496

5 US-10-424-599-240616

5 US-10-424-599-240616

5 US-10-424-599-240516

6 US-10-437-963-166786

US-10-437-963-166786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-425-115-191318
US-10-424-599-216152
                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                1717557 segs, 384547976 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                               - protein search, using sw model
                                                                                                                                                                                                        Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 50
                                                                                                                                                                                            BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21.3
21.3
21.3
21.1
20.0
19.3
19.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40,5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47.5
                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43.5
43.5
42.5
42.5
                                                                 OM protein
                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                           Database
```

ö

Gaps

ö

Result Š. Length 18 IndelB 2

ä

a

```
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: 99-21(53223)B
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT APPLICATION DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 264613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 179504, Application US/10424599;
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Zhou Yihua
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 240616, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)8
CURRENT PRILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 240616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                     ; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_80967C.1.pep
US-10-424-599-264613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Clone ID: PAT_MRT3847_59303C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11 PLFIY-----YKSSES-WNSNKTNLF-SHDAHTFN 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTAN 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 20.4%; Score 46; DB 15; Best Local Similarity 36.8%; Pred. No. 1e+02; Matches 14; Conservative 5; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 47.5; DE; Pred. No. 56; 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 DIVIESSDGLWNNNOTOLFLEHSLLTANIT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7 ETHTELDSPLWONNNLFIF----LTATTS 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21.1%;
40.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 12; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-424-599-240616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-424-599-240616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-424-599-179504
                                                                                                                                                                                                                                                                                                            LENGTH: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGIH: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                       APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT FILLING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 190016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: En Rosa Thomas J
APPLICANT: About K
APPLICANT: About Vibra
APPLICANT: About Vibra
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223) B
CURRENT APPLICANION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
ESCO ID NO 282496
LENGTH: 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15; Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15; Length 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Clone ID: PAT_MRT3847_142603C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: PAT_MRT3847_97115C.1.pep
US-10-424-599-282496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
21.3%; Score 48; DB
Best Local Similarity 37.9%; Pred. No. 54;
Matches 11; Conservative 7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21.3%; Score 48; DB 39.3%; Pred. No. 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12 TVTESSDGLWNNN----QTQLFLEHSLLT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 TPTQSSLNFYHSNTSLSETSFFIXHSLTT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 LWNNNQTQLFLEHSLLTA-----NTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 190016, Application US/10424599; Publication No. US20040031072A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 282496, Application US/10424599; Publication No. US20040031072A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 264613, Application US/10424599 Ublication No. US20040031072A1 GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
         SSDGLWNNNQTQLFLEHS 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                              US-10-424-599-190016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-424-599-190016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-424-599-282496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-424-599-264613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
```

ઠે Dp 3

ð 셤

```
FUBLICATION NO. US20040214272A1

Sublication No. US20040214272A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: Zhou, Yihua

APPLICANT: Zhou, Yihua

APPLICANT: Cao, Yongwei

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plante

FILE REFERENCE: 38-21(5322)B

CURRENT APPLICATION NUMBER: US/10/425,115

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 369326

SEQ ID NO 191318

LENGTH: 43

LENGTH: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: SITE
1 LOCATION: (7)
2 COTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-925-300-1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                            э,
Э,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                               Sequence 1011, Application US/09925300
| Sequence 1011, Application US/09925300
| Patent No. US20020151681A1
| GENERAL INFORMATION:
| APPLICANT: Craig Rosen,
| TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
| TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
| PILE REFERENCE: PAIO.
| CURRENT APPLICATION NUMBER: US/09/925,300
| CURRENT APPLICATION NUMBER: 2001-08-10
| PRIOR APPLICATION NUMBER: 60/124,200
| PRIOR PILING DATE: 1999-03-12
| NUMBER OF SEQ ID NOS: 1890
| SOFTWARE: PatentIN Ver. 2.0
| SEQ ID NO 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match . 19.1%; Score 43; DB 9; Length 43; Best Local Similarity 40.9%; Pred. No. 2.5e+02; Matches 9; Conservative 1; Mismatches 12; Indels
                                                                                                                            Indels
; OTHER INFORMATION: Clone ID: PAT_MRT4530_65460C.1.pep
US-10-437-963-166786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Clone ID: MRT4577_106061C.1.pep
US-10-425-115-191318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 42.5; DB 16;
Pred. No. 2.9e+02;
                                                                         Query Match
19.3%; Score 43.5; DB 16;
Best Local Similarity 47.8%; Pred. No. 2.1e+02;
Matches 11; Conservative 6; Mismatches 3;
                                                                                                                                                                                                           15 IWTLNITKLYLLKHTLL--NSTK 35
                                                                                                                                                                              20 LWNNNQTQLF-LEHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 WNNNOTOLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 WDYRHEQLHLVHMLLIVEEVKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.9%;
29.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-425-115-191318
                                                                                                                                                                                                                                                                                                                                  US-09-925-300-1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Bucklarov, Andrey A.
APPLICANT: Barbazuk, Brad
APPLICANT: Barbazuk, Brad
APPLICANT: Barbazuk, Brad
APPLICANT: Li, Pinc
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: La Roba Thomas J
APPLICANT: Cao Yongwei
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (5323) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER: OF SEQ ID NOS: 285684
                                                                                                                                                                                                                                                             ä
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3,
                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
19.3%; Score 43.5; DB 15; Length 31;
Best Local Similarity 37.5%; Pred. No. 1.4e+02;
Matches 9; Conservative 7; Mismatches 5; Indels
                                                                                                                                                                                                                                                        14; Indels
                                                                                                                         ; OTHER INFORMATION: Clone ID: PAT_MRT3847_133108C.1.pep
US-10-424-599-179504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: PAT_MRT3847_98836C.1.pep
US-10-424-599-284397
                                                                                                                                                                                                   Query Match 20.0%; Score 45; DB 15; Best Local Similarity 29.4%; Pred. No. 1.6e+02; Matches 10; Conservative 8; Mismatches 14
                                                                                                                                                                                                                                                                                                                                       10 NDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 166786, Application US/10437963
Publication No. US20040123343A1
GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Qu, Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 WNNNQT---QLFLEHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 WDNSRTYLVQFILENQLLSLSASK 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Glycine max
                                                  TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-10-424-599-284397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-437-963-166786
SEQ ID NO 179504
LENGTH: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 284397
LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 166786
                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
APPLICANT: La Rosa Thomas J
APPLICANT: La Rovalic David K
APPLICANT: APPLICANT: Avoilc David K
APPLICANT: Cao Yongwei
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (5222) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 277738
LENGTH: 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Show Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: In CANALIC.
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: APPLICANT: Abou, Yihuta
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Plants
FILE REPERENCE: 38-21 (53222) B
CURRENT APPLICATION NUMBER: US/10/425,115
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 369326
SEQ ID NO 367358
LENGTH: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 18.7%; Score 42; DB 15; Length 47
Best Local Similarity 34.2%; Pred. No. 3.8e+02;
Matches 13; Conservative 6; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 42; DB 16; Length 50
Pred. No. 4.1e+02;
6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Clone ID: PAT_MRT3847_92820C.1.pep US-10-424-599-277738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 YSYTTDGNDTVTE-SSDGLWNNNOTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ), OTHER INFORMATION: Clone ID: MRT4577_98200C.1.pep
US-10-425-115-367358
Sequence 277738, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-425-115-367358
; Sequence 367358, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 269343, Application US/10424599
; Publication No. US20040031072A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 LWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 18.7
Best Local Similarity 42.9
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-424-599-269343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                             Sequence 216152, Application US/10424599;
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILLE REFERENCE: 39-21(53223)B
CURRENT FILING DATE: 2003-04-28
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 216152
LENGTH: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 265756, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPRENCE: 38-21(5323)8
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 265756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
    ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18.7%; Score 42; DB 15; Length 35; 56.2%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
18.7%; Score 42; DB 15; Length 42;
Best Local Similarity 47.1%; Pred. No. 3.3e+02;
Matches 8; Conservative 3; Mismatches 6; Indels
  11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Clone ID: PAT_MRT3847_37214C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Clone ID: PAT_MRT3847_81999C.1.pep
US-10-424-599-265756
                                              1 PLYSYTTDGNDTVTESSDG-----LWNNNQT 26
                                                                          6 PMIFFAGDAHDTCVETTPGPGRSIRWPNSST 36
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Mismatches
    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 SDGLWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 STTLWNWWNDFIFIEHN 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTIDGNDTVTES 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                          RESULT 11
US-10-424-599-216152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-10-424-599-265756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-424-599-216152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-10-424-599-277738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                              ઠે
                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 269343
; LENGTH: 37
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_85237C.1.pep
US-10-424-599-269343

Query Match
Best Local Similarity 37.5%; Pred. No. 3.3e+02;
Matches 12; Conservative 3; Mismatches 16; Indels 1;
ON 1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH 32

OV 1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH 34

Search completed: June 29, 2005, 10:14:19
Job time: 26.4145 secs
```

THIS PACE BLANK USPTON

```
Peptide r
HIV pepti
Human pro
OSPF-rela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monoclona
Human KIM
Human KIM
Staphyloc
Human dig
Rat cadhe
Rat cadhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rat cadhe
Rat cadhe
Rat cadhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human IL-
Z peptide
Rat EST e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human con
Human pol
Modified
Human ORF
Novel hum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aao26686 Human KIM
Aao26687 Human KIM
                                                                       (without alignments)
565.693 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                            June 29, 2005, 09:03:05 ; Search time 28.7151 Seconds
                                                                                                                         1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aa026685
Ad807403
Aaw25651
Aaw25651
Aaw1116
Aaw6845
Aa066453
Aa066453
Aa1565
Aav25648
Aav3564
Aav3564
Aav3664
Aav3664
Aav3664
Aav83648
Aav83648
Aav83648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Adf60572 1
Adf59574 1
Aap91538 1
Abp11026 1
Abg30194 1
Ade03490 1
5.1.6
Compugen Ltd.
                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                             2105692 segs, 386760381 residues
version 9
                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                        protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO26685
ADS07403
AAM25081
AAW13116
AAW13116
AAW08045
AAW08045
AAB56453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR43565
AAW25648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW13113
AAR83059
AAW18789
AAM24315
ADF60572
ADF59574
AAP91538
                                                                                                US-10-718-321-6_COPY_40_
225
                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
GenCore (c) 1993
                                                                                                                                                                                                                                                                                                        geneseqp1980s:*
geneseqp1990s:*
geneseqp2000s:*
geneseqp2001s:*
                                                                                                                                                                                                                                                                                                                                                            geneseqp2003as:*
                                                                                                                                                                                                                                                                                              A_Geneseq_16Dec04:*
                                                                                                                                                                                                                                                                                                                                                  geneseqp2002s:*
                                                                                                                                                                                                                                                                                                                                                                                 geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
         Copyright
                                                                                                                                                                                                                     length: 0
length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                                   Beq
Beq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48.5
46
45.5
44.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43
                                                                                                    Title:
Perfect score:
                                                                                                                                             Scoring table:
                                       OM protein -
                                                                                                                                                                                                                      Minimum DB
Maximum DB
                                                                                                                          Sequence:
                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                              Database
                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Result
```

_	Aae28518 Neisseria	Aab34080 Human sec	Adf48735 Adenovira	Aar84975 Peptide r	Abu00797 S. pneumo	Aaw25650 Rat cadhe	Aaw13115 Rat cadhe	Aab20698 Polymeric	Aar85528 Sugar con	Aab34079 Human sec	Aag50726 Arabidops	Aar85014 Peptide r	Aar85810 Peptide r	Ada22738 Therapeut	Aay34178 Human pre	Aap70718 Equine in	Ade36036 Anaplasma	Ade72984 E. equi m	Aaw62593 Peptide h
ADO10179	AAE28518	AAB34080	ADF48735	AAR84975	ABU00797	AAW25650	AAW13115	AAB20698	AAR85528	AAB34079	AAG50726	AAR85014	AAR85810	ADA22738	AAY34178	AAP70718	ADE36036	ADE72984	AAW62593
æ	'n	m	7	~	9	~	~	m	7	m	m	~	~	9	~	٦	7	7	0
14	33	41	42	30	42	40	40	40	41	41	49	30	31	48	21	28	58	28	35
17.8	17.8	17.8	17.8	17.6	17.6	17.3	17.3	17.3	17.3	17.3	17.3	17.1	17.1	17.1	16.9	16.9	16.9	16.9	16.9
40	40	40	40	39.5	39.5	39	39	39	39	39	39	38.5	38.5	38.5	38	38	38	38	38

ALIGNMENTS

```
Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                           Human KIM-1 mucin domain related peptide, SEQ ID No 14.
Ź
AAO26686 standard; peptide; 18
                                                                                                                                 31-MAY-2002; 2002WO-US017402.
                                                                                                                                               01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                    (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                             (first entry)
                                                                                                                                                                                          Bailly V, Bonventre J;
                                                                                                                                                                                                        WPI; 2003-156845/15
                                                                                                    WO200298920-A1
                             20-MAR-2003
                                                                                                                  12-DEC-2002.
                                                                                      Synthetic.
              AA026686;
```

The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention

BGS-3 asp

ABP11026 ABG30194 ADE03490

41 40.5 40

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,

Disclosure; Fig 1A; 42pp; English

e.g. renal cancer

Best Loc Matches

ð 셤

```
The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a binding epitope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                        Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; binding epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44.0%; Score 99; DB 6; Length 18; 100.0%; Pred. No. 9.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human KIM-1 mucin domain related peptide, SEQ ID No 16.
                                                                                          Monoclonal antibody binding epitope, SEQ ID No 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Prec. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAO26688 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 25; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 SSDGLWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                   01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                        (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e.g. renal cancer.
                                                                                                                                                                                                                                         WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 AA;
                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2003
                                                     20-MAR-2003
                                                                                                                                                                                                                                                                            12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                   AA026673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X B X S X & & X B X B X B X S X C C
                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal soncer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                    Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44.0%; Score 99; DB 6; Length 18; 100.0%; Pred. No. 9.6e-06; ive 0; Mismatches 0; Indels
                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                     Human KIM-1 mucin domain related peptide, SEQ ID No 15.
                                  Score 101; DB 6; L
Pred. No. 5.3e-06;
0; Mismatches 0;
                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 1A; 42pp; English.
                                    44.5.,
100.0%; Fi
                                                                                                                                                                                                                                       AAO26687 standard; peptide; 18
                                                                                                                                  1 TDGNDTVTESSDGLWNNN 18
                                                                                                             7 TDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSDGLWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BIOJ ) BIOGEN INC. (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
nes 18; Conservative
                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ب.
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bonventre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-156845/15
                                                   Local Similarity
tes 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. renal cancer
 Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 AA;
Sequence 18
                                                                                                                                                                                                                                                                                                                20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                            AA026687;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
```

ö

Gaps

; 0

0; Indels

WO200298920-A1

RESULT 3 AAO26673 ID AAO26673 standard, peptide; 18 AA.

Matches

ò

ö

Gaps

```
The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention describes an isolated nucleic acid comprising a nucleotide sequence with any of 3772 fully defined nucleotide sequences (SEQ ID NO: 1-3772) and encoding an Staphylococcus epidermidis polypeptide with any of 3772 fully defined amino acid sequences (SEQ ID NO: 3772-7544) as given in the specification. Also described are: a recombinant expression vector; a cell comprising a recombinant expression vector of (1);
New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antibacterial; vaccine; antisense therapy; Staphylococcus epidermidis; recombinant expression vector; infection; computer readable medium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated polypeptide and encoding nucleic acid derived from Staphylococcus epidermidis, useful for diagnosing, preventing and/or treating an S. epidermidis bacterial infection.
                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                    DB 6; ...
o. 0.0015;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Staphylococcus epidermis polypeptide seqid 6698.
                                                                                                                                                                                                                                                                                                                                                                          36.4%; Score 82; DB 100.0%; Pred. No. 0.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 17; SEQ ID NO 6698; 741pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADS07403 standard; protein; 40 AA.
                                                                                                       Disclosure, Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0064964P.
98US-00134001.
99US-00450969.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-2003; 2003US-00724972
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTE 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLYSYTTDGNDTVTE 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus epidermidis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Doucette-Stamm L, Bush D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DOUC/) DOUCETTE-STAMM L.
                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100
les 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      computer based system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2004-580138/56.
                                                              e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; ADS03631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004147734-A1.
                                                                                                                                                                                                                                                                                                                                   Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADS07403;
                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADS07403
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel antibody, antibody derivative or antigen-
binding polypeptide that inhibits proteolytic release of a soluble
kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells.
The antibody, antibody derivative or antigen-binding polypeptide is
useful for treating or preventing renal disease or injury, e.g. renal
cancer. The antibody is also useful for inhibiting shedding of the KIM-1
polypeptide. This sequence represents a human KIM-1 mucin domain related
peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                        New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1. polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40.0%; Score 90; DB 6; Length 18; 100.0%; Pred. No. 0.00014; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human KIM-1 mucin domain related peptide, SEQ ID No 13.
                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 1A; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAO26685 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTOLFLEHSLLTANTTKG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2001; 2001US-0295449P.
                                      31-MAY-2002; 2002WO-US017402
                                                                               01-JUN-2001; 2001US-0295449P
04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                            (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
                                                                                                                                                                                                          Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-156845/15.
                                                                                                                                                                                                                                                 WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                         e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAR-2003
12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-2002
                                                                                                                                                                                                      Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
```

25

δ

원

AA026685;

RESULT 5

Query Match

Matches

```
producing an S. epidermidis polypeptide; an isolated nucleic acid
comprising a nucleotide sequence of at least 8 nucleotides in length; a
vaccine composition for prevention or treatment of an S. epidermidis
c infection, comprising a nucleic acid cited above and a carrier; treating
a subject for S. epidermidis infection, a recombinant or substantially
ure preparation of an S. epidermidis polypeptide or its fragment; a
vaccine composition for prevention or treatment of an S. epidermidis
infection; detecting the presence of a Staphylococcus nucleic acid in a
sample; a computer readable medium having recorded in it the nucleotide
sequences with SEQ ID NO: 1-3772 or its fragments; a computer based
system for identifying fragments of the Staphylococcus genome of
commercial importance; a computer based system for identifying fragments
commercially important nucleic acid fragments of the Staphylococcus
genome and/or plasmids; and identifying an expression modulating fragment
compositions of the present invention are useful for the diagnosis,
the staphylococcus genome and/or plasmids. The methods and
compositions of the present invention are useful for the diagnosis,
the fragment of an Staphylococcal epidermidis bacterial
infection. This is the amino acid sequence of a S. epidermis protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, digestive system antigen, gene therapy; cancer; appendicitis; ulcerative colitis; infection; Hirschsprung's disease; chronic colitis; digestive system disorder; Meckel's diverticulum.
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                           21.6%; Score 48.5; DB 8; Length 40; 33.3%; Pred. No. 84; ative 9; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                        2 LYSYTTDGNDTVTESSDGLWNNN-QTQLFLEHSLLT 36
                                                                                                                                                                                                                                                                                                                    Human digestive system antigen SEQ ID NO: 1430.
                                                                                                                                                                                                                                                                                                                                                                                   AAM92081 standard; protein; 49 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0184664P.
2000US-0184664P.
2000US-0186350P.
2000US-018974P.
2000US-019813P.
2000US-0205515P.
2000US-0209467P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0216647P.
2000US-0216880P.
2000US-0217487P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JAN-2001; 2001WO-US001324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0215135P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-JUL-2000; 2000US-0220964P
14-AUG-2000; 2000US-0224518P
                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-2001 (first entry)
                                                                                                                                                                                                                                                                    Local Similarity 33.3
                                                                                                                                                                                                                                         Sequence 40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200155314-A2
                                                                                                                                                                                                                   the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-FEB-2000;
24-FEB-2000;
02-MAR-2000;
16-MAR-2000;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-MAY-2000;
07-JUN-2000;
28-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                         AAM92081;
                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                            9999999999999999999988
                                                                                                                                                                                                                                                                                                                           a
```

```
2000US-0228924P.
2000US-0229287P.
2000US-0229343P.
                                                                                                                                                                                                                                                                                                                                                                                           2000US-0233065P.
2000US-0234223P.
2000US-0234274P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0237040P.
2000US-0239935P.
2000US-0239937P.
2000US-0240960P.
                                                                                                                                                                                                                                                                                                                                                   2000US-0232401P.
2000US-0233063P.
2000US-0233064P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0236327P.
2000US-0236367P.
                                                                                              2000US-0229344P.
2000US-0229345P.
                                                                                                                                                                 2000US-0230438P.
2000US-0231242P.
                                                                                                                                                                                             2000US-0231243P
                                                                                                                                                                                                                                      2000US-0231414P.
2000US-0232080P.
                                                                                                                                                                                                                                                                  2000US-0232081P.
2000US-0231968P.
                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0234997P.
2000US-0234998P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0236368P
2000US-0226681P
                                                                                                                          2000US-0229509P
                                                                                                                                         2000US-0229513P
                                                                                                                                                                                                                                                                                                                                      2000US-0232400P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0236802P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0241786P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0246476P
2000US-0246477P
                                                                                             01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
06-SEP-2000;
06-SEP-2000;
06-SEP-2000;
08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
08-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                  25-SEP-2000;
25-SEP-2000;
26-SEP-2000;
27-SEP-2000;
29-SEP-2000;
29-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                           14-SEP-2000;
21-SEP-2000;
21-SEP-2000;
```

23 IMKYSTQGDQKEXEGKASLWNALHTML 49

셤

```
The present invention provides the protein and coding sequences of a number of human digestive system antigens. These can be used in the diagnosis, treatment and prevention of digestive system disorders, including cancer, Meckel's diverticulum, bacterial or parasitic infections, appendicitis, Hirschaprung's disease, chronic colitis or ulcerative colitis. The present sequence is a digestive system antigen of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polynucleotides encoding digestive system antigens, useful for diagnosing, treating, preventing and/or prognozing disorders of the digestive system, particularly cancer and cancer metastases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 46; DB 4; Length 49;
Pred. No. 2.3e+02;
3; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 11; SEQ ID NO 1430; 986pp; English
08-NOV-2000; 2000US-0246478P.
08-NOV-2000; 2000US-0246523P.
08-NOV-2000; 2000US-0246524P.
08-NOV-2000; 2000US-0246525P.
08-NOV-2000; 2000US-0246526P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246538P.
08-NOV-2000; 2000US-0246538P.
                                                                                                                                 08-NOV-2000; 2000US-0246611P.
08-NOV-2000; 2000US-0246613P.
17-NOV-2000; 2000US-0249207P.
                                                                                                                                                                                                                          17-NOV-2000; 2000US-0249212P.
17-NOV-2000; 2000US-0249213P.
17-NOV-2000; 2000US-0249214P.
                                                                                                                                                                                                 2000US-0249210P.
2000US-0249211P.
                                                                                                                                                                                                                                                                                                                                                           2000US-0249265P.
2000US-0249297P.
2000US-0249299P.
                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-2000; 2000US-0249300P.
01-DEC-2000; 2000US-0250160P.
01-DEC-2000; 2000US-0250391P.
                                                                                                                                                                      17-NOV-2000; 2000US-0249208P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-DEC-2000; 2000US-0251988P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                           05-DEC-2000; 2000US-0251030P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 33...
Best Local Similarity
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Barash SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-502630/55.
N-PSDB; AAK87854.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 49 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the invention
                                                                                                                                                                                                                                                                                                                                                                         17-NOV-2000;
17-NOV-2000;
                                                                                                                                 08-NOV-2000;
                                                                                                                                                                                                               17-NOV-2000;
                                                                                                                                                                                                 17-NOV-2000;
                                                                                                                                                                                                                                                                 17-NOV-2000;
                                                                                                                                                                                                                                                                                17-NOV-2000;
                                                                                                                                                                                                                                                                                           17-NOV-2000;
                                                                                                                                                                                                                                                                                                          17-NOV-2000;
                                                                                                                                                                                                                                                                                                                                    7-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                              L7-NOV-2000;
                                                                                                                                                                                                                                                                                                                      L7-NOV-2000
                                                                                                                                                                                                                                                                                                                                                17-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen CA,
```

```
This sequence represents the cytoplasmic domain of rat cadherin-10. The invention specifically provides details of human cadherin-5, -8, -11, -12 and -13, and rat cadherin-8, -5, -11 and -13. Cadherins are calcium-capendent cell adhesion proteins. They are glycosylated integral membrane opendent cell adhesion proteins. They are glycosylated integral membrane proteins that have an N-terminal extracellular domain that determines contained by hydrophobic membrane spanning region and a C-terminal cytoplasmic domain, which is highly conserved among members of the superfamily. The C-terminal domain interacts with the cytoskeleton through extenins and other cytoskeleton-associated proteins. The novel cadherin proteins may be used in the analysis of the role of cadherins in investigation of the structure and function of cadherin. The cadherin proteins may be isolated by using anti-cadherin antibodies. These antibodies may also be used to modulate the activity of cadherin and to determine the tissue specific distribution of cadherin proteins. Each subclass of cadherins has a unique tissue distribution pattern. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human and rat cadherin polypeptide(s) - mediate cell-cell adhesion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15;
                                                                                                                                                                      calcium-dependent cell adhesion protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 20.2%; Score 45.5; DB 2; Length 40; Best Local Similarity 31.7%; Pred. No. 2.1e+02; Matches 13; Conservative 5; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------SSLESGTTEG 27
                                                                                                                                                                                           superfamily; cytoskeleton; eatenin; cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Col 29-30; 56pp; English.
                                                                                                                                       Rat cadherin-10 cytoplasmic domain.
                Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW13116 standard; protein; 40 AA.
              AAW25651 Btandard; protein; 40
                                                                                                                                                                                                                                                                                                                                                                       92US-00872643.
                                                                                                                                                                                                                                                                                                                                      94US-00332638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LATYAYEGNDSVAESL--
                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                             (DOHE-) DOHENY EYE INST
                                                                                     (revised)
                                                                                                                                                                        cadherin; rat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-362997/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAT85426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 40 AA;
                                                                                                                                                                                                                              Rattus rattus
                                                                                                                                                                                                                                                                                                                                      01-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                         17-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                         19-APR-1993;
                                                                                 25-MAR-2003
04-NOV-1997
                                                                                                                                                                                                                                                             US5646250-A.
                                                                                                                                                                                                                                                                                                  08-JUL-1997
                                                AAW25651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Suzuki S;
                                                                                                                                                                            Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW13116
ID AAW1
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
AAW2565
                               ઠ
```

ö

Gaps

ö

ä

```
HIV; gpl20; HIV-IIIB strain; HIV-1 transmission; foetal transmission; neutralising antibody; passive immunisation; anti-idiotypic antibody; gp41; vaccine; active immunotherapy; V3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UNIV PENNSYLVANIA.
WISTAR INST ANATOMY & BIOLOGY.
                                                                                                                                                                                                                         Claim 3; Page 276; 351pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW08045 standard; peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ugen KE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus 1.
                          95WO-US001210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92US-00891451.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-00218025
                                                      94US-00190802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Weiner DB,
                                                                                                            Mochly-Rosen D, Ron
                                                                                                                                        WPI; 1995-283772/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIV peptide #30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 31 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Williams WV,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-1992;
                          31-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-OCT-2003
03-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5556744-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1996.
10-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW08045;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UYPE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (-ISIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW08045
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence is the cytoplasmic domain of rat cadherin-10, which is a Ca2+ dependent cell adhesion protein. The rat cadherin CDNA was isolated from brain and retina cDNA by PCR, using degenerate primers designed to correspond to highly conserved sequences in the cytoplasmic domains of the mouse N-, E- and P-cadherins. The rat cDNA was then used to isolate the cDNA encoding its full length human homologue from a human foetal brain cDNA library. Antibodies or fragments that specifically bind the human cadherin can be used to purify the cadherin, determine its tissue expression and antagonise its ligand/antiligand binding activities. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WD40 repeat region; beta-transducin; protein-protein interaction; drug; intracellular signalling; protein kinase C; homology; motif; modulator; receptors of activated protein kinase; enzyme activity; isozyme; human.
                                                                                                                                                                                                                                                                                                                                                                                                              Antibodies to cadherin proteins - useful as cadherin antagonists, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                              Cytoplasmic domain; Ca2+ dependent; cell adhesion protein; foetal; cadherin; rat; brain; retina; human; antibody; purification; determination; tissue expression; binding antagonist; calcium ion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20.2%; Score 45.5; DB 2; Length 40; 31.7%; Pred. No. 2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----SSLESGTTEG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide rI from the WD-40 domain-contg. YCU7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Col 35-36; 59pp; English.
                                                                     Rat cadherin-10 cytoplasmic domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ŕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR85818 standard; peptide; 31
                                                                                                                                                                                                                                          94US-00188228,
                                                                                                                                                                                                                                                                    92US-00872643.
                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LATYAYEGNDSVAESL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                               (DOHE-) DOHENY EYE INST
                           (revised)
                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-108328/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAT61907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 40 AA;
                                                                                                                                                         Rattus rattus
                                                                                                                                                                                                                                          26-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9521252-A2
                                                                                                                                                                                                                                                                      17-APR-1992;
                          25-MAR-2003
13-MAY-1997
                                                                                                                                                                                   US5597725-A.
                                                                                                                                                                                                                                                                                 19-APR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
                                                                                                                                                                                                              28-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                        Suzuki S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR85818;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ~
AAW13116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
```

셤 ò

Ξ,

```
The peptides AAR84928-R85063 and AAR85786-R85842 are peptides derived from the WD40 regions of a range of proteins (AAR85851-R85893) containing WD-40 (also called beta-transducin) amino acid repeat regions. The WD-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               regions are involved in protein-protein interactions between proteins involved in intracellular signalling. An example of such an interaction is between protein kinase C and receptors of activated protein kinase (RACK), esp. RACK-1 (AAR85850). The proteins were isolated based on homology with beta-transducin or with its WD-40 consensus sequence. The peptides can be used to identify target proteins contg. WD-40 motifs, as modulators of enzyme esp. isozyme, activity of proteins involved in protein-protein interaction and to screen for drugs that will affect protein-protein interaction involving WD-40 domains. This peptide is derived from the repeat I from the YCU7 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                      New WD-40 (beta-transducin)-derived polypeptide(s) - which alter the activity of a protein, eg. protein kinase C, which interacts with a protein contg. a WD-40 region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19.8%; Score 44.5; DB 2; Length 31; 40.9%; Pred. No. 2e+02; ive 5; Mismatches 5; Indels
(STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :|: ||: || :|:
10 AYSPDGSRVVTASEDGKIKVWD 31
```

antigens, useful for treatment, prevention, and diagnosis of disorders

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                         AAW08016-W08073 represent HIV peptides that can be used in the method of the invention is for determining whether or not a mother will transmit HIV-1 to a foetus. The method comprises incubating a sample from the HIV-1 to a foetus. The method comprises incubating a sample from the HIV-1 infected mother, with a collection of HIV peptides. The HIV peptides includes at least one gp41 derived peptide (see AW07918-W07928), and at least one HIV gp120 derived peptide (see AW07918-W07917). The number of peptides that react with the sample is determined, and this number is compared with a standard that shows pattern reactivity for a patient of transmission status. A nontransmission and peptides as the standard. The method detects the presence of neutralising antibodies that protect against mother to infant transmission of HIV. These sequences can also be used in vaccines to used for passive immunisation, and to generate anti-idiotypic antibodies to used for passive immunisation, and to generate anti-idiotypic antibodies for use in vaccines or active immunotherapy. (Updated on 16-OCT-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; prostate cancer; prostate cancer antigen; detection; diagnosis; neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular; vulnerary; gastrointestinal; nephrotropic; antiinfective; gynaecological; antibacterial; gene therapy; neural; immune; reproductive; renal; gastrointestinal; pulmonary; cardiovascular; proliferative disorder; wound; infectious disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prostate cancer associated gene sequences, referred to as prostate cancer
                              Determining the likelihood of maternal transmission of HIV-1 to foetus by measuring maternal reactivity with specific gp120 and gp41 derived peptide(s), also used for diagnosing HIV in infants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human prostate cancer antigen protein sequence SEQ ID NO:1031.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              19.6%; Score 44; DB 2; Length 20; 39.1%; Pred. No. 1.48+02; ative 4; Mismatches 2; Indels
                                                                                               Disclosure; Col 59-60; 63pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PLFNSTWNGNNT------WNN 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 PLYSYTTDGNDTVTESSDGLWNN 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB56453 standard; protein; 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-MAR-2000; 2000WO-US005988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-MAR-1999; 99US-0124270P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA-) HUMAN GENOME SCI INC (ROSE/) ROSEN C A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 39..
9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                 standardise OS field)
WPI; 1996-432980/43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rosen CA, Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-587513/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAF15656
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200055174-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB56453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

```
ö
                                                                                              proteins, called protested antiqens, given in ABB5533 to AAB57302. The prostate cancer antiqens, given in ABB5633 to AAB57302. The prostate cancer antiqens can have neuroprotective, cytostatic, cardioactive, immunomodulatory, muscular, valnerary, gastrointestinal, nephrotropic, antiinfective, gynaecological and antibacterial activities, and can be used in gene therapy. The prostate cancer antigen polynucleotides may be used for detection of prostate cancer, chromosome identification, as chromosome markers, and for numerous other diagnostic or research purposes. The prostate cancer antigens may be used to treat disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, and proliferative disorders, wounds, and infections diseases. AAP16506 to AAP16514 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel method for modulating an immune response comprising administering to a subject an overlapping synthetic peptide formulation (OSPF) which comprises a combination of single chain peptides corresponding to the amino acid sequence of a protein of interest. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modulating an immune response, useful for treating immune disorders, e.g. viral, bacterial and parasitic infections, prion diseases, or neoplastic diseases, administering to a subject an overlapping synthetic peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunostimulant, virucide, antibacterial, antiparasitic, cytostatic, vaccine, viral, bacterial; parasitic infection; prion disease; neoplastic; toxin, SIV; envelope; Env.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immune response; overlapping synthetic peptide formulation; OSPF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OSPF-related SIV envelope (Env) peptide - SEQ ID 130.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 43; DB 3; 1
Pred. No. 4.7e+02;
                                                                                   prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; SEQ ID NO 130; 175pp; English.
                                                                                to AAF16505 encode the human
                                     Claim 11; Page 1460; 2338pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 WNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 WDYRHEOLHLVHMLLIVEEVKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADI95222 standard; peptide; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Simian immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                            19.1%;
40.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-JUN-2003; 2003WO-US020322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUN-2002; 2002US-0392718P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
Best Local Similarity 40.57
such as prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-082868/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004002415-A2
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ruprecht RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Formulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-JAN-2004
                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADI95222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
```

```
Human and rat cadherin polypeptide(s) - mediate cell-cell adhesion
                                                                          Human; cadherin; rat; calcium-dependent cell adhesion protein; superfamily; cytoskeleton; eatenin; cancer.
                                                                                                                                                       /note= "Encoded by CTC"
                                                                                                                                                                                                                                                                                                                                                                             Example 1; Col 27-28; 56pp; English.
                                                                                                                                 Location/Qualifiers
                                                        Rat cadherin-7 cytoplasmic domain.
                                                                                                                                                                                                                        94US-00332638.
                                                                                                                                                                                                                                                        93US-00049460.
                                                                                                                                                                                                                                              92US-00872643
                                  (first entry)
                                                                                                                                                                                                                                                                              EYE INST.
                         (revised)
                                                                                                                                                                                                                                                                                                                        WPI; 1997-362997/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                              Misc-difference 40
                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAT85423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 40 AA;
                                                                                                                                                                                                                                                                             (DOHE-) DOHENY
                                                                                                              Rattus rattus
                                                                                                                                                                                                                        01-NOV-1994;
                                                                                                                                                                                                                                                         19-APR-1993;
                      25-MAR-2003
04-NOV-1997
                                                                                                                                                                                                                                              17-APR-1992;
                                                                                                                                                                             US5646250-A.
                                                                                                                                                                                                  08-JUL-1997
                                                                                                                                                                                                                                                                                                  Suzuki S;
   AAW25648;
   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA encoding cadherins (CH)6,7,9 and 10 antibodies to CH 5,6,7,9 and 10 useful for modulating binding and regulatory activities of cadherins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rat cadherins-7 was isolated from a rat brain and retina cDNA library using degenerate PCR primers designed from highly conserved segments in the cytoplasmic domain of mouse N·, E, and P cadherins. See also AAR43564-7. (Updated on 25-MAR-2003 to correct PN field.)
method of the invention has immunostimulant, virucide, antibacterial, antiparasitic and cytostatic applications and may be useful during vaccine production and for treating immune disorders including viral, bacterial and parasitic infections, prion diseases, neoplastic diseases as well as providing protection against toxins. The current sequence is that of the OSPF-related SIV envelope (Env) peptide of the invention.
                                                                                                                        Gaps
                                                                                                                        ij
                                                                                                 18.9%; Score 42.5; DB 8; Length 20; 52.6%; Pred. No. 2.1e+02; Live 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 42; DB 2; Length 40; Pred. No. 5.8e+02;
                                                                                                                                                                                                                        AAR43565 standard; protein; 40 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; Page 41; 99pp; English
                                                                                                                                              13 VTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                  VTESFDA-WNNTVTEQAIE 18
                                                                                                                                                                                                                                                                                                                                                                                                                93WO-US003681.
                                                                                                                                                                                                                                                                                                                                                                                                                                     92US-00872643.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18.7%;
llarity 39.1%;
Conservative
                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DOHE-) DOHENY EYE INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1993-351714/44.
                                                                                                                                                                                                                                                                                                                        Antibodies; binding
                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAQ51223
                                                                              Sequence 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 40 AA;
                                                                                                                                                                                                                                                                                                    Rat cadherin-7.
                                                                                                                                                                                                                                                                                                                                               Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                    WO9321302-A1
                                                                                                                                                                                                                                                                                                                                                                                                                19-APR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                    17-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                          28-OCT-1993.
                                                                                                                       10;
                                                                                                                                                                                                                                                                  25-MAR-2003
19-JUN-1994
                                                                                                                                                                                                                                              AAR43565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŝ
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Suzuki
                                                                                                               Best Loca
Matches
                                                                                                                                                                                                  8888888888
                                                                                                                                              ઠે
                                                                                                                                                                  셤
```

```
This sequence represents the cytoplasmic domain of rat cadherin-7. The invention specifically provides details of human cadherin-5, -8, -11, -12 and -13, and rat cadherin-8, -5, -11 and -13. Cadherins are calcium—capendent cell adhesion proteins. They are glycosylated integral membrane proteins that have an N-terminal extracellular domain that determines binding specificity, a hydrophobic membrane spanning region and a C-terminal cytoplasmic domain, which is highly conserved among members of the superfamily. The C-terminal domain interacts with the cytoskeleton through eatenins and other cytoskeleton associated proteins. The novel cadherin proteins may be used in the analysis of the role of cadherins in threstigation of the structure and function of cadherin. The cadherin proteins may be isolated by using anti-cadherin antibodies. These antibodies may also be used to modulate the activity of cadherin and to determine the tissue specific distribution of cadherin proteins. Each subclass of cadherins has a unique tissue distribution pattern. (Updated on 25-MAR-2003 to correct PP field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 42; DB 2; Length 40; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: June 29, 2005, 09:41:05 Job time : 31.7151 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 LYSYTTDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18.7%;
39.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ö

Gaps

ö

Indels

ed. No. 5.8e+02; Mismatches 9;

2.

Local Similarity

Matches

LYSYTTDGNDTVTESSDGLWNNN 24 | :| :| :| :| :| | COLYAFEGNGSVAESLSSLDSNS 24

AAW25648 standard; protein; 40 AA.

RESULT 15 AAW25648 ID AAW2 XX

셤

```
5.1.6
Compugen Ltd.
 GenCore version (c) 1993 - 2005
             Copyright
```

OM protein - protein search, using sw model

Run on:

June 29, 2005, 09:27:45 ; Search time 5.611 Seconds (without alignments) 720.211 Million cell updates/sec

US-10-718-321-6_COPY_40_81

225 1 PLYSYTTDGNDTVTESSDGL.....NNQTQLFLEHSLLTANTTKG Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Scoring table:

11837 283416 seqs, 96216763 residues Searched:

Total number of hits satisfying chosen parameters: Minimum DB seq length: 0 Maximum DB seq length: 50

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		a			SUMMAKIES	
Result No.	Score	Query Match	Query Match Length	DB	ai	Description
-	43.5	19.3		2	S49365	Iq mu chain transm
7	42.5	18.9	46	7	A49281	l protein
m	39	17.3	30	7	D82251	hypothetical prote
4	38	16.9	35	~	830112	٠.
S	37	16.4	34	~	S68880	ribulose-bisphosph
9	37	16.4	47	7	AF0464	hypothetical prote
7	37	16.4	48	7	S29150	superoxide dismuta
80	36.5	16.2	46	7	F49281	pol protein - simi
9	36	16.0	20	7	B49410	t-complex polypept
10	35.5	15.8	29	~	A32860	biotin-binding pro
11	35.5	15.8	37	N	AG0540	hypothetical prote
12	35	15.6	20	~	A61149	endo-1,4-beta-xyla
13	34.5	15.3	46	7	D49281	pol protein - simi
14	34	15.1	31	~	S49191	othetical r
15	34	15.1	40	N	PQ0202	
	34	15.1	41	N	F82525	hypothetical prote
17	33.5	14.9	40	~	H95183	hetical
	33	14.7	38	7	S72344	
19	32.5	14.4	31	~	H82682	ĸ
20	ď	14.4	46	N	E49281	
21	32.5	14.4	. 48	~	PL0090	Ig heavy chain V r
22	32	14.2	24	7	A36912	hypothetical prote
23	32	14.2	26	7	B53113	Lys-gingipain form
24	32	14.2	28	~	G32351	34K class B flagel
25	32	14.2	29	~	I50214	protein-tyrosine-p
56	32	14.2	31	N	A57001	endo-1,4-beta-xyla
27	32	14.2	41	~	S56120	collagenase type I
28	32	14.2	42	7	I37543	MHC HLA-DR-beta-1
29	32	14.2	45	7	D45731	gene 39.2 protein

T-cell receptor be L-lactate dehydrog	cysteine proteinas hypothetical prote hypothetical prote	hypothetical prote opacity protein (c hypothetical prote hypothetical prote		photogystem I chai outer membrane pro T-cell receptor al
F49039 149422 847188	F45087 B82151 C83732	B97377 S11814 A99941 E85789	S78674 C37396 B43937	C42799 S26136 S03505
000	0 0 0	0 0 0 0	000	0 0 0
16 19	331	4 4 4 0 0 0 0 0	17 29	4 4 2 2 0 0
13.8 13.8	13.8.8.	13.8 13.8 8.61 13.8	13.6 13.6	13.6 13.6 13.3
31	3333	3333	30.5	30.5 30.5
30	1 W W W 1 W 4 W	33 3 4 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	444	4 4 4 W 4 7

ALIGNMENTS

```
C;Species: Amia calva (bowfin)
C;Date: 16-Reb-1995 #sequence_revision 12-May-1995 #text_change 20-Mar-1998
C;Accession: S49365
S;Milson, M.R.; Ross, D.A.; Miller, N.W.; Clem, L.W.; Middleton, D.L.; Warr, G.W.
Submitted to the EMBL Data Library, October 1994
A;Rescription: Alternate pre-mRNA splicing pathways in the production of membrane IgM hes
A;Reference number: S49365
A;Reterence number: S49365
A;Residues: 1-49 < WIL.)
A;Rolcoule type: mRNA
A;Residues: 1-49 < WIL.)
A;Cross-references: EMBL:X82070; NID:g557218; PID:g557219
                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                      Length 49;
                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          13;
                                                                                                                                                                                                                                                                                                                                                                      DB 2;
                                                                                                                                                                                                                                                                                                                                                                   Score 43.5; DB
Pred. No. 83;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 LYSYTTDGNDTVTESSDGLWNNNQTQLFL 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S VFQYYVDQNG-IEYNGDSLWNTVCTFIFL 32
Ig mu chain transmembrane region - bowfin
                                                                                                                                                                                                                                                                                                                                                                 19.3%;
ilarity 34.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 10; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

C;Species: similar T-cell lymphotropic virus type 1. Stru-1
C;Date: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C;Accession: A49281 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C;Accession: A49281 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C;Accession: A49281 #sequence_revision B: Diop, O.M.; Digoutte, J.P.; Math)
C; Paul, B:; Dube, D.K.; Barre-Sinoussi, F.; Poiesz, B.J.
Faul, B:; Dube, D.K.; Barre-Sinoussi, F.; Poiesz, B.J.
A;Title: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem)
A;Title: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem)
A;Accession: A49281
A;Accession: A49281
A;Accession: A49281
A;Accession: A49281
A;Accession: A49281
A;Accession: A49281
A;Confocular type: DNA
A;Residues: 1-46 <SAKA
A;Residues: UNIPROT:QB8390; GB:L20351; NID:g431689; PIDN:AAA16596.1; PID:g431690
C;Superfamily: pol polyprotein A49281 pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (isolate Bab34) (fragment)

18.9%; Score 42.5; DB 2; Length 46; ilarity 39.4%; Pred. No. 18+02; Conservative 3; Mismatches 14; Indels Local Similarity nes 13; Conserv Query Match Best Local S: Matches 13

'n

Gaps

3,

2 LYSYTIDGNDTVIES -- SDGLWNNNQTQLFLEH 32 13 LYKYFTDKPDLPMDNALSIGLWTFNHLNV-LTH 44 Š g

```
C;Species: Yersinia peetis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Accession. AF046 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Accession. AF040 #sequence_revision N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.;
deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; Il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, F.
Nature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Title: Genome sequence of Yersinia pestis, PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              superoxide dismutase (EC 1.15.1.1) (Cu-Zn) III, cytosolic - rice (fragment)
C;Species 10: Cryza sativa (rice)
C;Date: 30: Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Date: 30: Sep-1995, E61531
R;Kanematsu, S.; Asada, K.
Plant Cell Physiol. 31, 99-112, 1990
A;Reference mumber: S29146
A;Reference number: S29146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Roblecule type: protein
A;Residues: 1-48 «KAN»
A;Cross-references: UNIPROT:Q7M237
B;Kanematsu, S.; Asada, K.
Free Addic. Res. Commun. 12, 383-390, 1991
A;Title: Chloroplast and cytosol isozymes of CuZn-superoxide dismutase: their characterif
A;Reference number: A61531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Description: catalyzes the dismutation of 2 molecules of peroxide radical to dioxygen & C,Superfamily: superoxide dismutase [Cu-Zn] C,Keywords: copper; cytosol; metalloprotein; oxidoreductase; zinc F;44,46/Binding site: copper (His) #status predicted
                                       A)Genome: chloroplast
C;Function:
A;Description: catalyzes the reaction of carbon dioxide with D-ribulose 1,5-bisphosphate
C;Superfamily: ribulose-bisphosphate carboxylase large chain
C;Superfamily: calvin cycle; carbon dioxide fixation; carbon-carbon lyase; carboxy-lyase; c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: UNIPROT:Q8ZA17; GB:AL590842; PIDN:CAC93282.1; PID:g15981729; GSPDB:GR:C;Genetics:
A;Gene: YP03815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein YPO3815 [imported] - Yersinia pestis (strain CO92)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                Query Match 16.4%; Score 37; DB 2; Length 34;
Best Local Similarity 47.1%; Pred. No. 3.5e+02;
Matches 8; Conservative 0; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 16.4%; Score 37; DB 2; Length 47; Best Local Similarity 39.1%; Pred. No. 5.1e+02; Matches 9; Conservative 5; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 NNSLGYNNNVQVY--HFLLDSNT 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 SDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 YTTDGNDTVTESSDGLW 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 YTPDYETKDAESSTGTW 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: protein
A;Residues: 1-48 <KA2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Accession: AF0464
A,Status: preliminary
A,Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Residues: 1-47 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: E61531
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ribulose-bisphosphate carboxylase (EC 4.1.1.39) large chain - kidney bean chloroplast (f C;Species: chloroplast Phaseolus vulgaris (kidney bean)
C;Date: 04-Dec-1997 #sequence_revision 04-Dec-1997 #text_change 09-Jul-2004
C;Accession: 568880
R;Yoshida, T.; Minamikawa, T.
Extra Circulation of the control of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aminoglycoside N6'-acetyltransferase (EC 2.3.1.82) - Klebsiella pneumoniae plasmid pCFFG C, Species: Klebsiella pneumoniae
C, Species: Klebsiella pneumoniae
C, Species: Klebsiella pneumoniae
C, Date: 30-8ep-1993 #sequence_revision 30-8ep-1993 #text_change 05-May-2000
C, Accession: S30112
Mol. Genet. 235, 113-121, 1992
A, Title: A new example of physical linkage between Th1 and Tn21: the antibiotic multiple A, Reference number: S30112; MUD: 93062798; PMID:1331747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: UNIPROT:Q9KT75; GB:AE004184; GB:AE003852; NID:g9655483; PIDN:AAF9418
A;Experimental source: serogroup O1; strain N16961; biotype El Tor
                                                                                          hypothetical protein VC1030 [imported] - Vibrio cholerae (strain N16961 serogroup O1) C; Species: Vibrio cholerae (C; Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004 C; Accession D8251
R; Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.; Chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers, F. H. R.R.; Makalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
A; Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
```

Gaps

ö

Length 30

Score 39; DB 2; I Pred. No. 1.7e+02; 0; Mismatches 5;

17.3%;

Query Match
Best Local Similarity 61.5
Matches 8; Conservative

A, Map position: 1 A; Gene: VC1030

Genetics:

A;Status: preliminary A;Molecule type: DNA A;Residues: 1-30 <HEI>

A; Accession: D82251

g

ð

```
16.4%; Score 37; DB 2; Length 48;
  Query Match
```

A;Cross-references: UNIPROT:Q7M2E2

Molecule type: protein Residues: 1-34 <YOS>

A; Accession: S68880 A; Molecule type: pro

Gaps

ö

Score 38; DB 2; Length 35; Pred. No. 2.7e+02; 2; Mismatches 3; Indels

16.9%; 58.3%;

Query Match 16.9 Best Local Similarity 58.3 Matches 7; Conservative

3 YSYTTDGNDTVT 14 || |: ||:|| 24 YSIVTNSNDSVT 35

ద

ð

A;Genome: plasmid C;Keywords: acyltransferase; antibiotic resistance; coenzyme A

A; Cross-references: EMBL: X64525

A; Gene: aacA4

C;Genetics:

A;Molecule type: DNA A;Residues: 1-35 <MAB>

```
biotin-binding protein I - chicken (fragment)
C;Species: Gallus gallus (chicken)
C;Species: 22-Nov-1989 #sequence_revision 22-Nov-1989 #text_change 24-Jun-1993
C;Accession: A32860
R;Bush, D.; White III, H.B.
J; Biol. Chem. 264, 5741-5745, 1989
A;Title: Conversion of domains into subunits in the processing of egg yolk biotin-binding A;Reference number: A32860; MUID:89174628; PMID:2925632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypotherical protein STV0342 [imported] - Salmonella enterica subsp. enterica serovar Typotherical protein STV0342 [imported] - Salmonella enterica subsp. enterica serovar Typhi A;Note: this species has also been called Salmonella typhi C;Date: this species has also been called Salmonella typhi C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002 C;Accession: A60540
R;Parkhill, J; Dougan, G; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Churcher, t., T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Farrar, S.; Noule, S.; O'Gaora, P.
Nature 413, 848-852, 2001
A;Athtore: Parry, C.; Quall, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Arcession: A60540
A;Attle: Complete genome sequence of a multiple drug resistant Salmonella enterica serove A;Resience number: A80502; MUID:21534947; PMID:11677608
A;Accession: A60540
A;Status: preliminary
A;Residues: preliminary
A;Residues: 1-37 APRN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Description: catalyzes the hydrolysis of 1,4-beta-xylosidic linkages in xylans A; Pathway: xylan degradation C; Superfamily: endo-1,4-beta-xylanase; endo-1,4-beta-xylanase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: GB: AL513382; PIDN: CAD08767.1; PID: 916501585; GSPDB: GN00176

    fungus (Trichoderma viride) (fragment)

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Trichoderma viride
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 09-Jul-2004
C;Accession: A61149
R;Ujite, M.; Roy, C.;
Appl. Environ. Microbiol. 57, 1860-1862, 1991
A;Title: Low-molecular-weight xylanase from Trichoderma viride.
A;Reference number: A61149; MUID:91336731; PMID:1872616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 35.5; DB 2;
Pred. No. 6e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 35.5; DB 2;
Pred. No. 4.5e+02;
1; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         endo-1,4-beta-xylanase (EC 3.2.1.8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A,Accession: A61149
A,Molecule type: protein
A,Residues: 1-50 <UJI>
A,Cross-references: UNIPROT:Q7M4V8
C,Function:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 GLWENEQDSL-MEISAL 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                        15.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 GLWININQTQLFLEHSLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 61.5.
Reg Ry Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7 TDGNDTVTESSDG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 TDGNDN-TRKQDG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 52.9
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-29 <BUS>
                                                                                                                                                                                                                                                                                                                  A; Accession: A32860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             t-complex polypeptide 1 homolog (peak 6a fraction) - rabbit (fragments)
N,Alternate names: chaperonin homolog (peak 6a)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 21-Sep-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: B49410
R;Rommelaere, H.; Van Troys, M.; Gao, Y.; Melki, R.; Cowan, N.J.; Vandekerckhove, J.; Am Proc. Natl. Acad. Sci. U.S.A. 90, 11975-11979, 1993
A;Title: Bukaryotic cytosolic chaperonin contains t-complex polypeptide 1 and seven rela A;Reference number: A49410; MUID:94089752; PMID:7903455
                                                                                                                                                                                                                                                                                                   pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (fragment)
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
C;Date: 19-Mar-1997 #sequence revision 19-Dec-1997 #text_change 09-Jul-2004
C;Accession: F49281; B49281
R;Saksena, N.K.; Herve, V.; Durand, J.P.; Leguenno, B.; Diop, O.M.; Digoutte, J.P.; Math Paul, B.; Dube, D.K.; Barre-Sinoussi, F.; Poiesz, B.J.
Virology 198, 297-310, 1994
A;Title: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:Q88344; UNIPROT:Q88360; UNIPROT:Q88343; UNIPROT:Q88394; UNIF
PROT:Q88331; UNIPROT:Q88406; GB:L20357; NID:g431721; PIDN:AAA16561.1; PID:g431722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-46 <SA2>
A;Residues: 0.246 <SA2>
A;Zrose-references: 0.24120358; NID:g431709; PIDN:AAA16556.1; PID:g431710
A;Experimental source: isolate SAB91037
C;Superfamily: pol polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q9TRD7
A;Experimental source: reticulocyte
A;Note: sequence modified after extraction from NCBI backbone
A;Note: sequence extracted from NCBI backbone (NCBIP:141037)
C;Superfamily: molecular chaperone t-complex-type
                                                     Indels
Pred. No. 5.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 36.5; DB 2;
Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16.0%; Score 36; DB 2; I 28.6%; Pred. No. 7.3e+02; iive 6; Mismatches 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 LYSYTTDGNDTVTES -- SDGLWNNNQTQLFLEH 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LYKYPTDKPDLPMDNALSIALWTINHLNV-LTH 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A, Experimental source: isolate SAB37Pol
A, Accession: B49281
A, Status: preliminary; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: P49281
A; Status: preliminary; translation not shown
     50.0%; Pre-
                                                                                                           3 YSYTTDGNDTVTESSDGL 20
                                                                                                                                                                19 PSQEGDGPTTVTXSVSGL 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.2%;
Best Local Similarity 36.4%;
Matches 12; Conservative 3
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-50 <ROM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
hes 10; Conserv
                    Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-46 <SAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                              ઠ
                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
```

ö

Gaps ö

Score 34; DB 2; Length 40; Pred. No. 1e+03; 3; Mismatches 3; Indels

```
A; Title: Amino acid compositions and partial sequences of xylanases from a new subspecies A; Reference number: PQ0202; MUD:92118324; PMID:1368735
A, Rocession: PQ0202
A, Molecule type: protein
A; Residues: 1-40 cTSU-
A; Cross-references: UNIPROT:09R5P8
A; Experimental source: subsp. alba OPC-18
C; Comment: This enzyme is important for the breakdown of xylan.
C; Function:
A, Pescription: catalyzes the hydrolysis of 1,4-beta-xylosidic linkages in xylans
A; Pathway: xylan degradation
C; Superfamily: endo-1,4-beta-xylanase; endo-1,4-beta-xylanase homology
C; Keywords: glycosidase; hydrolase; polysaccharide degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: June 29, 2005, 09:47:29
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 50.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 YSYTTDGNDTVT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 YSFWTDGGGSVS 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Job time : 6.611 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                        RESULT 13
D49281
pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (isolate Pat24) (fragment)
C; Species: simian T-cell lymphotropic virus type 1, STLV-1
C; Date: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C; Accession: D49281
R; Saksena, N.K.; Herve, V.; Durand, J.P.; Leguenno, B.; Diop, O.M.; Digoutte, J.P.; Math
S; Paul, B.; Dube, D.K.; Barre-Sinoussi, F.; Poiesz, B.J.
Virology 198, 297-310, 1994
A; Title: Sercepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem
A; Reference number: A49281; MUID:94082462; PMID:8259665
A; Accession: D49281
A; Status: preliminary; translation not shown
A; Residues: 1-46 < SAK>
A; Residues: 1-46 < SAK>
A; Residues: UNIPROT:088403; GB:L20353; NID:9431711; PIDN:AAA16557.1; PID:9431712
C; Superfamily: pol polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14

S49191

Style

S49191

Style

S49191

C; Pacin protein 6 - Azotobacter vinelandii (fragment)

C; Species: Azotobacter vinelandii

C; Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 09-Jul-2004

C; Accession: S49191

C; Accession: S49191

S; van Dongen, W.; Haaakr, H.

Submitted to the EMBL Data Library, April 1992

A; Description: Molecular cloning of fixA, fixB, fixC and fixX genes of Azotobacter vinel

A; Reference number: S49186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              endo-1,4-beta-xylanase (EC 3.2.1.8) II - Nocardiopsis dassonvillei (fragment)
N;Alternate names: xylanase
C;Species: Nocardiopsis dassonvillei
C;bate: 31-bec-1991 #sequence_revision 31-bec-1991 #text_change 09-Jul-2004
C;Accession: PQ0202
R;Tsujibo, H.; Sakamoto, T.; Miyamoto, K.; Hasegawa, T.; Fujimoto, M.; Inamori, Y.
Agric. Biol. Chem. 55, 2173-2174, 1991
  C;Keywords: glycosidase; hydrolase; polysaccharide degradation; pyroglutamic acid F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 15.3%; Score 34.5; DB 2; Length 46; l Similarity 36.4%; Pred. No. 1e+03; 12; Conservative 3; Mismatches 15; Indels
                                                                                             Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15.1%; Score 34; DB 2; Length 31; 54.5%; Pred. No. 7.5e+02; ative 2; Mismatches 3; Indels
                                                                                                                                                  4; Indels
                                                                                       Score 35; DB 2; I
Pred. No. 9.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 LYSYTTDGNDTVTES--SDGLWNNNQTQLFLEH 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Accession: S49191
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-31 <WIE>
A;Cross-references: UNIPROT:Q44509; EMBL:X65515
                                                                                                                                               1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Mismatches
                                                                                       15.6%;
nilarity 58.3%;
Conservative
                                                                                                                                                                                                          3 YSYTTDGNDTVT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6; Conservative
                                                                                                                                                                                                                                                               15 YSYWNDGHGGVT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24 NOTOLFLEHSL 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | |||| |::
NDIQLFLAHAI 12
                                                          Query Match
Best Local Similarity
7; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
20-MAR-2003
                                                                                                                                                                                                                                                                                 12-DEC-2002
                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                      AA026686;
                                                                                                                                                                                                                                                                                                                                                                                                 e.g.
                                                                                                                                                                                Aao26686 Human KIM
Aao26687 Human KIM
Aao26673 Monoclona
Aao26681 Human KIM
Aao26682 Human KIM
                                                                                                                                                                                                                                                                                                                                                        Human KIM
Human KIM
                                                                                                                                                                                                                                                                                                                                                                            Peptide #
Peptide #
Peptide #
Protein #
Human bon
                                                                                                                                                                                                                                                                                                                                                                                                                          Human pep
P. papata
Human tes
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human sec
Novel hum
                                                                                                                                                                                                                                                                                                                                                                                                                   Human liv
                                                                                                                                                                                                                                                                                                                                                                      Human KIM
                                                                                                                                                                                                                                                                                                                                                                                                                                              Human sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human gen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse alp
                                     June 29, 2005, 09:03:05; Search time 55.3792 Seconds (without alignments) 565.693 Million cell updates/sec
                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                   Human
                                                                       432
1 MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                  Aao26683
Aao26685
Aao26684
Aao26688
Aam20331
Abb40865
Aam34632
Abb25019
Aam74520
                                                                                                                                                                                                                                                                                                                                                                                                                                            Aab56300 I
Abo59205 I
Abb50592 I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Abo44849 1
Abo26329 1
                                                                                                                                                                                                                                                                                                                                                                                                            Aam61724 1
Abg56310 1
                                                                                                                                                                                                                                                                                                                                                                                                                          Abg44381 | Abr91655 | Abu53259 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aae02139
                                                                                                                           938430
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                              2105692 segs, 386760381 residues
                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                         - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                     AAO26688
AAM20331
ABB40865
AAM34632
ABB25019
                                                                                                                                                                                                                                                                                                                                                                                                     AAM74520
AAM61724
ABG56310
ABG44381
ABR91655
ABB53259
AAB56300
ABO59205
                                                                                                                                                                                                                                                                                                                                                        AA026685
AA026684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AB026329
AAE02139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4B044849
                                                                                                                                                                                                                                                                                                                               AA026673
                                                                                                 Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                         geneseqp2000s:*
geneseqp2001s:*
geneseqp2002s:*
                                                                                                                                                                                                                             geneseqp2003as:*geneseqp2003bs:*
                                                                                                                                                                                      Geneseq 16Dec04:*
                                                                                                                                                                                             geneseqp1980s:*
geneseqp1990s:*
                                                                                                                                                                                                                                          geneseqp2004s:
                                                                 US-10-718-321-6
                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 50
                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                              Query
Match 1
                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                          Scoring table:
                         OM protein
                                                                                                                                        Minimum DB
Maximum DB
                                                                              Sequence:
                                                                                                             Searched:
                                                                                                                                                                                      Database
                                      Run on:
                                                                                                                                                                                                                                                                                                                                           Result
                                                                                                                                                                                                                                                                                                      Š.
```

	Aar88860 Peptide t Ads07403 Staphyloc	Aar75547 P. commun Aaw08045 HIV Depti	_			Aab63400 Human bre	Abp35345 Human ORF	Abr91640 P. papata	Aay11409 Human 5'	Aam96710 Human rep	Aau22911 Human pro	Adj09484 Human pro	Aaw45839 Peptide r	Aay31378 Human pro	Aae34173 T-cell st	Adp73905 Human ant
AAU99631 AAY12405	AAR88860 ADS07403	AAR75547 AAW08045	AB055454	AAU44389	ABM40908	AAB63400	ABP35345	ABR91640	AAY11409	AAM96710	AAU22911	ADJ09484	AAW45839	AAY31378	AAE34173	ADP73905
10 01		~ ~														
35	4 4 0 4	19	48	20	20	46	20	23	38	46	46	46	20	56	30	38
11.6	11.2	11.1	11.1	11.1	11.1	11.0	11.0	10.9	10.8	10.8	10.8	10.8	10.6	10.6	10.6	10.6
50	48.5 48.5	8 4 8 8	48	48	48	47.5	47.5	47	46.5	46.5	46.5	46.5	46	46	46	46
26	7 7 8 7 8	30	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.

Disclosure, Fig 1A; 42pp; English.

The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is cancer. The antibody is also useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention

Matches

ઠે 요

g

AA026687 RESULT

```
The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a binding epitope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                   Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor, kidney injury molecule-1, KIM-1, renal disease, injury, renal cancer, binding epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytostatic, gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22.9%; Score 99; DB 6; Length 18; 100.0%; Pred. No. 0.0032; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human KIM-1 mucin domain related peptide, SEQ ID No 9.
                                                                                    Monoclonal antibody binding epitope, SEQ ID No 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 25; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAO26681 standard; peptide; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSDGLWNNNQTQLFLEHS 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55 SSDGLWNNNQTQLFLEHS 72
                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                        01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                           (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 22.9
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ن.
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bonventre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 AA;
                                                                                                                                                                                                                                WO200298920-A1
                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAR-2003
                                                  20-MAR-2003
                                                                                                                                                                                                                                                                   12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA026681;
              AA026673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA026681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                      Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                   .
0
                               23.4%; Score 101; DB 6; Length 18; 100.0%; Pred. No. 0.002; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 99; DB 6; Length 18;
Pred. No. 0.0032;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                        Human KIM-1 mucin domain related peptide, SEQ ID No 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. ...
                                                                                                                                                                                                                                AAO26687 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 1A; 42pp; English.
                                                                                                                           TDGNDTVTESSDGLWNNN 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18
                                                                                                      46 TDGNDTVTESSDGLWNNN 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55 SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BIOJ ) BIOGEN INC. (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18; Conservative
                                                                   18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e.g. renal cancer
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200298920-A1.
                                                                                                                                                                                                                                                                                                     20-MAR-2003
Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      >
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                 AA026687;
                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bailly
```

ò

Gaps

ö

WO200298920-A1

AAO26673 standard; peptide; 18 AA.

RESULT 3 AAO26673 ID AAO2

Matches

ð 요 us-10-718-321-6.closed.rag

```
renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 1A; 42pp; English.
                                                                                                                                                                                                                                                                                                AAO26683 standard; peptide; 18 AA.
                                                  Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                      PVATSPSSPQPAETHPTT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                           10 PVATSPSSPQPAETHPTT
                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                               Query Match 22.5
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                         peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-156845/15.
                               e.g. renal cancer.
                                                                                                                                                              Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                       20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                    AA026683;
                                                                                                                                                                                                                                                                                      AA026683
                                                                                                                                                                                                                                                                           RESULT
  ð
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                             The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                        New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                   ; DB 6; hell.
o. 0.0041; indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human KIM-1 mucin domain related peptide, SEQ ID No 10.
                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                        Pred. No.
                                                                                                                                                                                                                                                                                                                            Score 98;
                                                                                                                                                                                            Disclosure; Fig 1A; 42pp; English.
                                                                                                                                                                                                                                                                                                                    22.7%; Scc...
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAO26682 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                                                                                    1 MPLPRQNHEPVATSPSSP 18
                                                                                                                                                                                                                                                                                                                                                                                       MPLPRONHEPVATSPSSP 18
                                       01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001; 2001US-0295449P.
                    31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002WO-US017402
                                                                    (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                     Local Similarity 100
                                                                                                  Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-156845/15.
                                                                                                                      WPI; 2003-156845/15
                                                                                                                                                                       e.g. renal cancer
                                                                                                                                                                                                                                                                                                        Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200298920-A1
12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA026682;
                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                 AA026682
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
ઠ
```

```
ö
                                                                                                                                                                                                                                                                                                      The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related
New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6; her.
0. 0.0052;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human KIM-1 mucin domain related peptide, SEQ ID No 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 0.0
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22.5%; Score 97;
100.0%; Pred. No.
ive 0; Mismatc
```

Matches

ð g

SXS

RESULT 7

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal ancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                      Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 92; DB 6; Length 18;
Pred. No. 0.017;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human KIM-1 mucin domain related peptide, SEQ ID No 16.
                                                                                                                        Human KIM-1 mucin domain related peptide, SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAO26688 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 1A; 42pp; English.
                AAO26684 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21.3%; Scu-
100.0%; Pre
0; '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28 LOGAIRREPTSSPLYSYT 45
                                                                                                                                                                                                                                                                                                                                                                          01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 LOGAIRREPISSPLYSYT
                                                                                                                                                                                                                                                                                                                                                                                                                              (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 21.3
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e.g. renal cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 AA;
                                                                                                                                                                                                                                                                      WO200298920-A1.
                                                                                       20-MAR-2003
                                                                                                                                                                                                                                                                                                       12-DEC-2002
                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA026688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                    AA026684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
 AO26684
                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits protecolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                          ö
                                                                        Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22.0%; Score 95; DB 6; Length 18; 100.0%; Pred. No. 0.0083; ive 0; Mismatches 0; Indels
                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                              Human KIM-1 mucin domain related peptide, SEQ ID No 13.
                                                                      Score 96; DB 6; 1
Pred. No. 0.0065;
                                                                                                          Mismatches
                                                         22.2%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                        AAO26685 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                           36
                                                                                                                                                                              1 OPAETHPTTLOGAIRREP 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSSPLYSYTTDGNDTVTE
                                                                                                                                             OPAETHPTTLOGAIRREP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC. (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                           18; Conservative
peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-156845/15.
                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200298920-A1.
                                     Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                           20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            37
                                                                                                                                               13
                                                                                                                                                                                                                                                                                                         AA026685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -
                                                                      Query Match
```

ö

Gaps

ö

e.g.

œ

, RESULT

ઠે

AMO26685

IID AMO2

XX AMO2

XX AMO2

XX AMO2

XX Huma

XX Huma

XX Fena

X

```
The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human Helae cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithalial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                      Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a single exon nucleic acid probe for measuring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; foetal liver; gene expression; single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide #8371 encoded by human foetal liver single exon probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 27; SEQ ID NO 33500; 639pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                       Score 60; DB 4; Length 50, Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |||||||
| ATSPSSSRAAPTLPAPTVAPTACPGAVPR-PTTTP 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 ATSPSS-----POPAETHPTTLOGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Mismatches
                                                                                                                                                     Claim 27; SEQ ID NO 25157; 487pp; English.
                                  Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ę
(MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB40865 standard; peptide; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC
                                  3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0207456P.
2000US-00608408.
2000US-00632366.
2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                        13.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000GB-00024263
                                Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 44.4 tes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel DK,
                                  Hanzel DK,
                                                                   WPI; 2001-488901/53
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200157277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB40865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                  sg,
                                    Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB40865
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury moblecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                               New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide #6765 encoded by probe for measuring cervical gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 90; DB 6; Lengtu .c.,
Pred. No. 0.027;
                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAM20331 standard; protein; 50 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20.8%; SU
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , 2000US-0207456P.
; 2000US-00608408.
; 2000US-003366.
; 2000US-0234687P.
; 2000US-0234687P.
                                                                                31-MAY-2002; 2002WO-US017402
                                                                                                                 01-JUN-2001; 2001US-0295449P
04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QTQLFLEHSLLTANTTKG
                                                                                                                                                                  (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                        Bonventre J;
                                                                                                                                                                                                                                                         WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cervical cancer
            WO200298920-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000;
30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-AUG-2000;
                                               12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                                                                                                                        Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM20331;
```

64

셤 ઠે

RESULT 10

Matches

2

Gaps

..

Ā

20

(first

88888888888

g ઠે

```
Protein #7018 encoded by probe for measuring heart cell gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                       Human, gene expression, heart, microarray, vascular system;
cardiovascular disease, hypertension, cardiac arrhythmia;
ATSPSSSRAAPTLPAPPTVAPTACPGAVPR-PTTTP 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001; 2001WO-US000666
                                                                                                    ABB25019 standard; protein;
                                                                                                                                                                                                                                                                        congenital heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-488899/53
                                                                                                                                                                                                                                                                                                                                            WO200157274-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-2000;
                                                                                                                                                                       23-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                                        ABB25019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penn SG,
                                                                                                                        셤
                   셤
                                                                                                                                                                                                         ñ
                 single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide #8669 encoded by probe for measuring placental gene expression.
                                                                                                                                                                                                           Gaps
     gene expression in a sample derived from human foetal liver.
                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 60; DB 4; Length ou, Pred. No. 1.1e+02;
                                                                                                                                                                         Length 50;
                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probe; microarray; human; placenta; antenatal diagnosis; genetic disorder.
                                                                                                                                                                                                                                          40
                                                                                                                                                                      Match 13.9%; Score 60; DB 4; 1 Local Similarity 44.4%; Pred. No. 1.1e+02; les 16; Conservative 3; Mismatches 9
                                                                                                                                                                                                                                                              12 ATSPSS------PQPAETHPTTLQGAIRREPTSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 27; SEQ ID NO 34901; 654pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene expression in human placenta.
                                                                                                                                                                                                                                                                                                                                                               AAM34632 standard; protein; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0207456P.
2000US-00608408.
2000US-00632366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-488897/53
                                                                                                                                         Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200157272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                  17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-AUG-2001
                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                               AAM34632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
       human
                                                                                                                                                                                            Best Loc
Matches
                                                                                                                                                                                                                                                                                                                          RESULT 12
AAM34632
```

Chen W, Rank DR;

Hanzel DK,

2000US-0207456P. 2000US-00608408.

2000GB-00024263

```
3
                                                                                                                                                                                                                By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease. Note: The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                              The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see MARAISS). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.9%; Score 60; DB 4; Le
44.4%; Pred. No. 1.1e+02;
cive 3; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATSPSS-----POPAETHPTTLQGAIRREPTSSP
                                                                                                                                                                                                                                                                                                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequences
Claim 15; SEQ ID NO 26789; 530pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM74520 standard; protein; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 44.4%;
16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
```

ò

3; Mismatches

16; Conservative

13.9%;

Query Match Best Local Similarity

7

Gaps

.. 8

```
Search completed: June 29, 2005, 09:41:02 Job time : 58.3792 Becs
  30-JAN-2001; 2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                  Penn SG,
                                                                                                                                                                                        brains.
                                                                                                                                                                            Single
  #X#######X#X#X#X#X#X
                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                                               Human genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human brain expressed single exon probe encoded protein SEQ ID NO: 33829.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; brain expressed exon; gene expression analysis; probe; microarray;
Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                               Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma.
                                          Human bone marrow expressed probe encoded protein SEQ ID NO: 34826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                              Example 4; SEQ ID NO 34826; 658pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 60; DB 4; Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12 ATSPSS-----POPAETHPTTLOGAIRREPISSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1.1e+02;
3; Mismatches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rank DR
                                                                                                                                                                                                                                                                                                                                                         gene expression in human bone marrow.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAM61724 standard; protein; 50 AA
                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                   Chen W,
                                                                                                                                                                                                                     03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                           2000US-00608408.
                                                                                                                                                                30-JAN-2001; 2001WO-US000668
                                                                                                                                                                                                                                                       2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44.48;
                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 44.4
Hes 16; Conservative
                                                                                                                                                                                                                                                                                                   Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                        WPI; 2001-488900/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 50 AA;
                                                                                                                     WO200157276-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157275-A2
                                                                                                                                                                                     04-FEB-2000; 2
26-MAY-2000; 2
30-JUN-2000; 2
                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                       04-OCT-2000;
                     06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-2001,
                                                                                                                                           09-AUG-2001
AAM74520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM61724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
.;
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                                                                                                                                                         exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
8
                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; SEQ ID NO 33829; 650pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.9%; Score 60; DB 4; Ler
44.4%; Pred. No. 1.18+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 ATSPSS-----PQPAETHPTTLQGAIRREPTSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rank DR;
                                                                                                                                                                            (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                          Chen W,
26-MAY-2000; 2000US-0207456P
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00532366.
21-SEP-2000; 2000US-0234687P.
                                                                                                 27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                        Hanzel DK,
                                                                                                                                                                                                                                                                         WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 16, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 50 AA;
```

THIS PAGE BLANK USPID®

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

June 29, 2005, 09:27:45 ; Search time 10.8212 Seconds (without alignments) 720.211 Million cell updates/sec Run on:

US-10-718-321-6

432 1 MPLPRQNHBPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG Perfect score:

Sequence:

Gapop 10.0 , Gapext 0.5

BLOSUM62

Scoring table:

Total number of hits satisfying chosen parameters: 283416 segs, 96216763 residues Searched:

11837

seq length: 0 seq length: 50 Minimum DB Maximum DB Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

1: pirl: * 2: pir2: * 3: pir3: * 4: pir4: * PIR_79:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	ဗ	hypothetical 5.2K	arabinogalactan pr	hypothetical prote	Ig mu chain transm	hypothetical prote	ъ.	extensin - tomato	pol protein - simi				hypothetical prote	androgen-binding p	hypothetical prote	lipoprotein vsaH [collagen alpha 1(X	hypothetical prote	hypothetical prote	ribulose-bisphosph	hypothetical prote	Ig alpha chain, tr	hypothetical prote	superoxide dismuta	mucin - sheep (fra	histone H1 - sea u	one H1 - g		sepiapterin reduct
SUMMARIES	ID	170082	JJ0404	S07073	AE3429	849365	T29628	S30112	T07030	A49281	C87603	I40692	B38839	AH2135	A40703	D82251	A99578	A37172	E84436	B82151	S68880	A19434	S24713	AF0464	S29150	A29789	S68616		F49281	832108
	DB	2	N	~	~	7	7	~	~	~	8	N	N	~	~	0	~	~	N	0	~	~	~	~	7	0	7	~	~	~
	Length	42	43	46	47	49	31	35	42	4	4	7	32	20	47	30	42	36	48	31	34	44	45	47	48	50	22	36	46	47
	Query Match	13.2	11.8	11.0	11.0	10.1	10.0		10.0	9.6	9.7	9.4	9.4	9.4	9.1	٠	0.6		•	9.8	•	•	•	•	8.6	9.8	8.4	8.4	8.4	8.4
	Score	57	51	47.5	47.5	•	43	43	43	42.5	42	40.5	٠	ö	39.5				38			37	37	37	37	37	ė.	36.5	ė.	36.5
	Result No.		7	m	4	'n	9	7	æ	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

JU0404

JU0404

JU0404

JU0404

In prochetical 5.2K protein - clover yellow mosaic virus

C;Species: clover yellow mosaic virus

C;Species: 14-Jul-1994 #sequence_revision 14-Jul-1994 #text_change 09-Jul-2004

C;Accession: JU0404

R;Abouhaidar, No.; Lai, R.

J. Gen. Virol. 70, 1871-1875, 1989

A;Title: Nucleotide sequence of the 3'-terminal region of clover yellow mosaic virus RNA

A;Reference number: JU0402; MUID:89293092; PMID:2738582

EP-APSPTTPEPTSEPAPSPTT----PEPTSEPAPSPTT 38

g

A;Molecule type: genomic RNA A;Residues: 1-43 <ABO> A;Cross-references: UNIPROT:P16485; GB:D00485; NID:g221218; PIDN:BAA00374.1; PID:d100082 A;Note: this protein is encoded by sequence in front of the coat protein-encoding sequen

A; Accession: JU0404

ä

Gaps

4

Query Match 11.8%; Score 51; DB 2; Length 43; Best Local Similarity 45.8%; Pred. No. 1e+02; Matches 11; Conservative 3; Mismatches 6; Indels

g

ઢ

troponin T 2fa - r	phospholipase A2 (hypothetical prote	coagulation factor	t-complex polypept	outer membrane pro	biotin-binding pro	hypothetical prote	histone H5 - pigeo	hypothetical prote	gamma-hordein 3 -	beta-fructofuranos	ATP synthase beta-	translation initia	hypothetical prote
146522	C32416	G64625	A10933	B49410	826130	A32860	AG0540	HSPYS	B87585	B24095	\$72213	A48186	855937	T37138
9 0	9 (4	~	~	~	7	~	~	-	7	~	7	7	~	Ņ
8 4 8	7 4 7	33	37	20	20	29	37	38	39	40	49	23	32	38
4. 4	 	8.3	8.3	8.3	8.3	8.2	8.2	8.2	8.2	8.2	8.3	8.1	8.1	8.1
36.5	36	36	36	36	36	35.5	35.5	35.5	35.5	35.5	35.5	35	35	35
							38							

ALIGNMENTS

```
A Accession: I70082
ASTATUS: preliminary; translated from GB/EMBL/DDBJ
A;Astatus: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-42 <RES>
A;Cross-references: UNTROT:Q16469; GB:S34439; NID:g249178; PIDN:AAB22153.1; PID:g249179
C;Superfamily: platelet glycoprotein Ib alpha chain; leucine-rich alpha-2-glycoprotein r
C;Keywords: glycoprotein
                                                                                                                                             RiLopez, J.A.; Ludwig, B.H.; McCarthy, B.J.
J. Biol. Chem. 267, 10055-10061, 1992
A;Title: Polymorphism of human glycoprotein Ib alpha results from a variable number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ñ
                                      C.Species: Homo sapiens (man)
C.Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 09-Jul-2004
C.Accession: 170082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
13.2%; Score 57; DB 2; Length 42;
Best Local Similarity 43.9%; Pred. No. 26;
Matches 18; Conservative 3; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 EPVATSPSSPQPAE---THPTTLQGAIRREPTSSPLYSYTT 46
                                                                                                                                                                                                                                                                                               A;Reference number: 155355; MUID:92250564; PMID:1577776
glycoprotein Ib alpha variant B - human (fragment)
                                                                                                                                                                                                                                                                ations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

```
aminoglycoside N6'-acetyltransferase (EC 2.3.1.82) - Klebsiella pneumoniae plasmid pCFFO. C;Species: Klebsiella pneumoniae
C;Species: Klebsiella pneumoniae
C;Species: Klebsiella pneumoniae
C;Species: Klebsiella pneumoniae
C;Species: S30112
R;Mabilat, C.; Lourencao-Vital, J.; Goussard, S.; Courvalin, P.
Mol. Gente. 235, 113-121, 1931
A;Fitle: A new example of physical linkage between Tnl and Tn21: the antibiotic multiple-A;Reference number: S30112; MUD:93062798; PMID:1331747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          extensin - tomato (fragment)
C;Species: Lycopersicon esculentum (tomato)
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Genome: plasmid
C;Keywords: acyltransferase; antibiotic resistance; coenzyme A
A;Cross-references: EMBL:X82070; NID:g557218; PID:g557219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10.0%; Score 43; DB 2; Le
ilarity 32.3%; Pred. No. 4.9e+02;
Conservative 6; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUDVIQQGSRPKTKLGITKYSIVTNSNDSVT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23 THPTTLQGAIRREPTSSPLYSYTTDGNDTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 1-35 <MAB>
A;Cross-references: EMBL:X64525
C;Genetics:
                                                                             Local Similarity
ses 10; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A, Gene: CESP: K09E3.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: T29628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Accession: T07030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Accession: S30112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Introns: 21/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: aacA4
                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C, Genetics:
                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                 ð
                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ig wu chain transmembrane region - bowfin (Species: Amia calva (bowfin) (CjSpecies: Amia calva (bowfin) (CjSpecies: Amia calva (bowfin) (CjSpecies: Amia calva (bowfin) (CjDate: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 20-Mar-1998 (CjSpeciesion: 849365 #sequence_revision 12-May-1995 #text_change 20-Mar-1998 (SiWilson, M.R.; Ross, D.A.; Miller, N.W.; Clem, L.W.; Middleton, D.L.; Warr, G.W. submitted to the EMBL Data Library, October 1994 Appearation atternate pre-mRNA splicing pathways in the production of membrane IgM he Appearance number: 849365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABSULT 4
AB3429
hypothetical protein BMEI1419 [imported] - Brucella melitensis (strain 16M)
C;Species: Brucella melitensis
C;Species: Brucella melitensis
C;Date: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 09-Jul-2004
C;Datesion: AB3429
R;DelVecchio. V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; Ivanova, Mazur, M.; Goltsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Letess Proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A;Title: The genome sequence of the facultative intracellular pathogen Brucella melitens
A;Reference number: AD3252; PMID:11756688
                                                                                arabinogalactan protein - Italian ryegrass (fragments)
(Species: Lolium multiflorum (Italian ryegrass)
(Species: Lolium multiflorum (Italian ryegrass)
(Spaces: 21-Nov-1993 #sequence_revision 01-Dec-1995 #text_change 09-Jul-2004
(Spacession: 807073
(Riglesson, P.A.; McNamara, M.; Mettenhall, R.E.H.; Stone, B.A.; Fincher, G.B.
(A) Fille: Characterization of the hydroxyproline-rich protein core of an arabinogalactan-A; Reference number: 807073; MUID:90147544; PMID:2695069
                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: UNIPROT:Q7M1G3
Note: 119-His and 23-Leu were also found
C;Keywords: hydroxyproline
F;6,7,9,11,14,16,18,20,26,30,34,36,39/Modified site: hydroxyproline (Pro) #status experi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: UNIPROT:Q8YFV1; GB:AE008917; PIDN:AAL52600.1; PID:g17983419; GSPDB:G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٠,
ک
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11.0%; Score 47.5; DB 2; Length 47; 45.9%; Pred. No. 2.5e+02; tive 3; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 PRONHEPVATSP--SSPOPAETHP-TTLOGAIRREPT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11.0%; Score 47.5; DB 2;
47.8%; Pred. No. 2.5e+02;
tive 2; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 PLPRQNHEPVA---TSPSSPQPA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Experimental source: strain 16M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 45,9%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 47.8
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: protein A; Residues: 1-46 <GLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Ktatus: preliminary
A; Molecule type: mRNA
A; Residues: 1-49 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A Status: preliminary A Molecule type: DNA A Residues: 1-47 < KUR>
                                                                                                                                                                                                                                                                                                                                A; Accession: S07073
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Genetics:
A;Gene: BMEI1419
A;Map position: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
S49365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

ö

Gaps

ö

```
Cross-references: UNIPROT: Q21399; EMBL: U41033; PIDN: AAA82376.1; CESP: K09E3.4
                                                                                                                                                                                                                                                                                                                                              hypothetical protein K09E3.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Aate: 15-041-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T29628
R;Johnson, D.; Gattung, S.
submitted to the RMBL Data Library, November 1995
A;Description: The sequence of C. elegans cosmid K09E3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
10.1%; Score 43.5; DB 2; Length 49; ilarity 34.5%; Pred. No. 6.6e+02; Conservative 5; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 10.0%; Score 43; DB 2; Length 31; Local Similarity 33.3%; Pred. No. 4.2e+02; es 12; Conservative 2; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 RONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RSSHSNTGLPPL-----PTTAQLPIMEEPTTVP 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-31 <JOH>
                                                                                                                                                                         S VFQYYVDQNG-IEYNGDSLWNTVCTFIFL 32
                                                                                                                                       41 LYSYTTDGNDTVTESSDGLWNNNQTQLFL 69
```

ო

Page

```
C; Accession: I40692

K; Miller, P.B.; Shen, H.; Gilkes, N.R.; Kilburn, D.G.; Miller, R.C.; Plaut, A.G.; Warren FEMS Microbiol. Lett. 92, 199-204, 1992
A; Title: Endoglucanase A from Cellulomonas fimi in which the hinge sequence of human IgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Accession: AH2135
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anał A;Reference number: AB1807; MUID:21595285; PMID:11759840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                                cenA protein (IgAlh) - Cellulomonas fimi (fragment)
C;Species: Cellulomonas fimi
C;Date: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 22-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          histone H1 - sea urchin (Strongylocentrotus intermedius) (fragment)
C;Species: Strongylocentrotus intermedius
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Cross-references: EMBL:X65780; NID:g312035; PIDN:CAA46663.1; PID:g312036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein as12639 [imported] - Nostoc sp. (strain PCC 7120)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C,Accession: B38839
R,Suzuki, M.; Sugiura, M.; Ebashi, S.
B;Suzuki, M.; Sugiura, M.; Ebashi, S.
B;Suzuki, M.; Sugiura, P355, 1990
A;Title: Sea urchin procease specific to the SPKK motif in histone.
A;Reference number: PS0145; WUID:91115778; PMID:2126010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9.4%; Score 40.5; DB 2; Length 32; 38.5%; Pred. No. 7.7e+02; tive 1; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 PVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTT 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 PPTPSPLOSNVT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 40.5; DB 2;
Pred. No. 5.7e+02;
1; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Accession: I40692
A;Status: prealiminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-25 <RES>
                             4 PRONHEPVATSPSSPQPAETHPTTLQG 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A.Cross-references: UNIPROT:Q7M407
C,Superfamily: histone H1
C,Keywords: chromosomal protein; nucleosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 PSSPQPAETHPTTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PASPOKRAASP-----RRSPKKSP 19
                                                                 Query Match 9.4%;
Best Local Similarity 32.4%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 38.59
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: 140692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: protein A;Residues: 1-32 <SUZ>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A Status: preliminary
A Molecule type: DNA
A Residues: 1-50 < KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: B38839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                  RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B38839
                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:Q40145; EMBL:Z46675; NID:9575949; PIDN:CAA86660.1; PID:95759
A;Experimental source: strain Marmande; Meloidogyne incognita-induced root knot
C;Superfamily: hydroxyproline-rich glycoprotein
C;Keywords: cell wall; glycoprotein; hydroxyproline
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A49281

pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (isolate Bab34) (fragment)

pol protein - simian T-cell lymphotropic virus type 1, STLV-1

C;Speciaes : simian T-cell lymphotropic virus type 1, STLV-1

C;Speciaes : simian T-cell lymphotropic virus type 1, STLV-1

C;Date: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004

C;Accession: A49281

R;Saksena, N.K.; Herve, V.; Durand, J.P.; Leguenno, B.; Diop, O.M.; Digoutte, J.P.; Math

F; Paul, B.; Dabe, D. D.; Barre-Sinoussi, F.; Poiesz, B.J.

Virology 198, 297-310, 1994

A;Title: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem

A;Title: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukem

A;Status: preliminary; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypothetical protein CC2859 [imported] - Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 09-Jul-2004
C;Accession: C87603
R;Nierman, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J. B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolon J.; Exmolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M. A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: A87249; MUID:21173698; PMID:11259647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,Cross-references: UNIPROT:Q9A4H5; GB:AE005673; NID:g13424473; PIDN:AAK24823.1; GSPDB:G
C,Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Residues: 1-46 <SAK>
A;Cross-references: UNIPROT:Q88390; GB:L20351; NID:g431689; PIDN:AAA16596.1; PID:g431690
C;Superfamily: pol polyprotein
                         Ġ
R; van der Bycken, W.; de Almeida Engler, J.; Inze, D.; van Montagu, M.; Gheysen, Plant J. 9, 45-54, 1996
A;Title: A molecular Brudy of Meloidogyne incognita-induced feeding sites.
A;Reference number: 215873; MUID:96158345; PMID:8580972
A;Accession: T07030
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Roceule type: mRNA
A;Residues: 1-42 <VAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٠.
۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 10.0%; Score 43; DB 2; Length 42; Local Similarity 29.7%; Pred. No. 6.1e+02; He 11; Conservative 2; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch
1 Similarity 39.4%; Score 42.5; DB 2; Length 4
1 Similarity 39.4%; Pred. No. 7.6e+02;
13; Conservative 3; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 9.7%; Score 42; DB 2; Length 41; Best Local Similarity 29.6%; Pred. No. 7.4e+02; Matches 8; Conservative 6; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 PVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTT 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 PIYKSPPPPTPAYNSP------PPPYYLYTS 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LYKYPTOKPOLPMDNALSIGLWTFNHLNV-LTH 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 LYSYTTDGNDTVTES--SDGLWNNQTQLFLEH 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA A; Residues: 1-41 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: C87603
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A:Gene: CC2859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठ
```

```
Job time : 12.8212 secs
A,Cross-references: UNIPROT:Q8YTS4; GB:BA000119; PIDN:BAB74338.1; PID:g17131732; GSPDB:d
A,Experimental source: strain PCC 7120
C;Genetics:
A,Gene: as12639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
A40703
androgen-binding protein ABP (N-terminal, exon A) - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Species: L6-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Date: 16-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Date: 16-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
R;Sullivan, P.M.; Wang, Y.M.; Joseph, D.R.
Mol. Endocrinol: 7, 702-715, 1993
A;Title: Identification of an alternate promoter in the rat androgen-binding protein/sex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypothetical protein VC1030 [imported] - Vibrio cholerae (strain N16961 serogroup 01)
hypothetical protein VC1030 [imported] - Vibrio cholerae (strain N16961 serogroup 01)
C;Species: Vibrio cholerae
C;Species: Vibrio cholerae
C;Species: Vibrio cholerae
C;Accession: D8251
Exelateberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.;
chardson, D.; Ermolaeva, M.D.; Vanathevan, J.C.; Fraser, C.M.
I, R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
A;Trle: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A82035; MUID:20406833; PMID:10952301
A;Accession: D82251
A;Accession: D82251
A;Residues: 1-30 cHEI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Accession: A40703
A;Status: preliminary
A;Molecule type: nucleic acid
A;Rosesiues: 1-47 <SUL.
A;Crose-references: UNIPROT:Q08946; GB:U85959; GB:S62931; NID:g1872518; PIDN:AAB49304.1;
A;Note: sequence extracted from NCBI backbone (NCBIN:134229, NCBIP:134230)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Cross-references: UNIPROT:O9KT75; GB:AE004184; GB:AE003852; NID:g9655483; PIDN:AAF9418
A,Experimental source: serogroup O1; strain N16961; blotype El Tor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                             ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
9.1%; Score 39.5; DB 2; Length 47;
Best Local Similarity 42.3%; Pred. No. 1.5e+03;
Matches 11; Conservative 3; Mismatches 11; Indels
                                                                                                                                                                     Query Match 9.4%; Score 40.5; DB 2; Length 50; Best Local Similarity 27.0%; Pred. No. 1.3e+03; Matches 10; Conservative 5; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.0%; Score 39; DB 2; Length 30;
61.5%; Pred. No. 9.9e+02;
tive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Reference number: A40703; MUID: 93302779; PMID: 7686253
                                                                                                                                                                                                                                                                                                                                                 7 NHEPVATSPSSPQPAETHP---TTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 VATSPSS-POPAETHPTTLOGAIRRE 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 VPLOPSTVPVPSFPRPTTLEANOSRE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 61.5
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 LFLEHSLLTANTT 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Genetics:
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

Search completed: June 29, 2005, 09:47:28

12 LFYEHELLRLNVT 24

g

```
NCBI_TaxID=232107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P16485 clover yell

O7th6 human adeno

O7m193 lollum mult

O89fv1 brucella me

O861u3 cryptospori

O810r6 cryptospori

O810r6 cryptospori

O810r6 cryptospori

O810r6 cryptospori

O810r6 archaromyc

O5mp3 arabidopsis

O91fr2 chimpanzee

O811s chimpanzee

O811s chimpanzee

O8141 cryptospori

O8141 chimpanzee

O7th/h human adeno

O7th/h human adeno
                                                              June 29, 2005, 09:09:20 ; Search time 48.8546 Seconds (without alignments) 849.017 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                           US-10-718-321-6
432
1. MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                   68540
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                           1612378 seqs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                          - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07THI1
07THI2
                                                                                                                                                                                                                                                                                                                    UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length DB
                                                                                                                                                                                                                                      Minimum DB seq length: 0 Maximum DB seq length: 50
                                                                                                           Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          47.5
47.5
47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44.5
44.5
                                          OM protein
                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                      Database
                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               330837833510
330837833510
310887883583578
                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
```

Q7thi3 human adeno Q7thi4 human adeno Q7thi6 human adeno Q7thi7 human adeno Q7thi9 human adeno Q7thi9 human adeno Q7t4q0 human adeno Q7t4q1 human adeno Q7t4q3 human adeno Q7t4q4 human adeno Q7t4q4 human adeno Q7t4q5 human adeno Q7t4q6 human adeno Q7t4q6 human adeno Q7t4q6 human adeno	NTS	43 AA. update) on update) ies, no DNA stage; Flexiviridae;	region of clover yel	produced through a collaborat tics and the EMBL outstatio ere are no restrictions on as its content is in no Usage by and for commerc http://www.isb-sib.ch/announ	FDOD555B7BB3C6CB CRC64;	DB 1; Length 43; 6.8e+02; ches 6; Indels 4; Gaps 1;		RT; 30 AA. nated) t sequence update) t annotation update) stage; Adenoviridae; Mastadenovirus;
30 2 07TH13 30 2 07TH14 30 2 07TH16 30 2 07TH19 30 2 07TH19 31 2 07TH19 35 2 07TH29 35 2 07TH29	ALIGNMENTS	ARD; PRT; Created) Last sequence up Last annotation protein. virus (CYMV).	SEQUENCE FROM N.A. MEDLINE=89293092; PubMed=2738582; Abouhaidar M.G., Lai R.; "Nucleotide sequence of the 3'-terminal virus RNA"; J. Gen. Virol. 70:1871-1875(1989).	is copyright. It stitute of Bioinf matics Institute. institutions as I ement is not rem cense agreement cense@isb-sib.ch		11.8%; Score 51; DB larity 45.8%; Pred. No. 6.8e Conservative 3; Mismatches	PRQNHEPVATSPSSPQPAETHPTT 27 : :: PRQSHLPAQTPQPRLSYPKT 39	F 5, Cre 5, Las 6, Las 0, RNA
44444444444444444444444444444444444444		CYMV 485, AUG-19 AUG-19 AUG-19 Otheti ver ye sses, Exviru	[1] SEQUENCE FROM N.A. MEDLINE=89293092; Pubh Abouhaidar M.G., Lai I "Nucleotide sequence o' virus RNA."; J. Gen. Virol. 70:1873	s SWISS-PROT even the Swie European Bioi by non-profilised and this ities requires send an email	EMBL, D00485; BAA00374.1; PIR, JU0404, JU0404. Hypothetical protein. SEQUENCE 43 AA; 5189 M	atch cal Simi 11;	4 PRQNHEPVAT : 20 PRQSHLPAQT	11 2 46 O7THH6 PRELIMINARY; O7THH6 O7THH6 O7THH6 O7THH6 O1THH O1 O1 O1 OTHH6 O1
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	RESULT 1	ì		CC CC Better CC		Query M Best Lo Matches	ço Qo	RESULT 2 Q7THH6 ID Q7T AC Q7T DT 01-1 DT 01-1 DT 01-1 DT 01-1 DT 01-1 OC VIR
				<u> </u>				

```
STRAIN=16M / ATCC 23456 / Biotype 1;

STRAIN=16M / ATCC 23456 / Biotype 1;

MEDLINES=20020109; PubMed=11756688; DOI=10.1073/pnas.221575398;

MEDLINES=20020109; PubMed=11756688; DOI=10.1073/pnas.221575398;

MEDLINES=20020109; PubMed=11756688; DOI=10.1073/pnas.221575398;

Ivanova N., Anderson I., Bhattacharyya A., Lykidis A., Reznik G., Jablonski L., Larsen N., D'Souza M., Bernal A., Mazur M., Goltsman E., Selkov B., Elzer P.H., Hagius S., O'Callaghan D., Letesson J.-J., Haselkorn R., Kyrpides N.C., Overbeck R.;

"The genome sequence of the facultative intracellular pathogen Brucella mellitensis."
                                                                                                                                                                                                                                                                                                                                     47 AA; 5180 MW; 989EE40500EC57D0 CRC64;
                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 99:443-448(2002).
EMBL; AE009579; AAL52600.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical protein.
                                                                                                                                                                                                                                                                                           PIR; AE3429; AE3429.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                     Complete proteome. SEQUENCE 47 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=870;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QBIOR6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q86LU3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QBIOR6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     286113
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arabinogalactan protein (Fragments).
Lolium multiflorum (Tralian ryegrasa).
Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta;
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, Pooideae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Characterization of the hydroxyproline-rich protein core of an arabinogalactan-protein secreted from suspension-cultured Lolium multiflorum (Italian ryegrass) endosperm cells.", Biochem. J. 264:857-862(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
.,
                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11.0%; Score 47.5; DB 2; Length 46; 47.8%; Pred. No. 1.6e+03; Live 2; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=90147544; PubMed=2695069;
Gleeson P.A., McNamara M., Wettenhall R.E.H., Stone B.A.,
Fincher G.B.;
                                                                                                                                                                                                                                                                                                                                     Score 48; DB 2; Length 30;
Pred. No. 8.5e+02;
3; Mismatches 8; Indels
                                 Lee C., Lee S.-H., Han B., Kim S.-J.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AY280886; AAP43056.1; -.
HSSP; P03277; 1222.
GO; GO:0019028; C:viral capsid; IEA.
GO; GO:005198; F:structural molecule activity; IEA.
InterPro; IPR000736; Adeno, hexon.
Pfam; PF01065; Adeno, hexon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46 AA; 4173 MW; EF61188B0C8A08D0 CRC64;
                                                                                                                                                                                                                                                                                             531F6F951E27039B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR 2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Hypothetical protein BMEI1419.
OrderedLocusNames=BMEI14191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 PLPRQNHEPVA---TSPSSPQPA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |:| : ||| | || || || || pvpeastapvaapttxpsppapa 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                      ProDom; PD002815; Adeno_hexon; 1. MON TER 30 30 SEQUENCE 30 AA, 3450 MW; 531F
                                                                                                                                                                                                                                                                                                                                                                                                                                 34 REPISSPLYSYTTDGNDTVT 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s knetvaetydvitorsorut 24
                                                                                                                                                                                                                                                                                                                                   Query Match il.1%;
Best Local Similarity 45.0%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2004 (TrEMBLrel. 26, 01-MAR-2004 (TrEMBLrel. 26, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Brucellaceae, Brucella.
NCBI_TaxID=29459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Brucella melitensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=4521;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Poeae; Lolium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEOUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QBYFV1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OBYFV1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q7M1G3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
08YFV1
10 08YFV1
AC 08YF
AC 08YF
DT 01-M
DT 01-M
DT 01-M
DT 01-M
CO BECT
OC BET
OC B
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
7
                                                        ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from
humans and animals by using a heteroduplex mobility assay and nucleic
acid sequencing based on a small double-stranded RNA element.";
J. Clin. Mccrobiol. 41:981-992 (2003).
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                        5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4,
Score 47.5; DB 2; Length 47;
Pred. No. 1.6e+03;
3; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Alveolata; Apicomplexa; Coccidia; Bimeriida;
Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein (Fragment).

Cryptosporidium parvum.

Bukaryota, Alveolata; Apicomplexa, Coccidia; Eimeriida;

Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43 AA; 4750 MW; 1D0A81C40B323D35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-WAR-2003 (TrEMBLrel. 23, Created)
01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update) Hypothetical protein (Fragment).
                                                                                                                                              12 PRR--DAVLRSPDDSAPQPAATAPNTTTQNRWRELKT 46
                                                                                                              37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : || : :::||| :||| 37
3 FVTDLSSDLSNTADGLGQAW-YKISQVAIEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10.9%; Score 47; DB 2; 133.3%; Pred. No. 1.6e+03;
                                                                                                            4 PRONHEPVATSP--SSPOPAETHP-TTLOGAIRREPT
                                                                                                                                                                                                                                                                                                          Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Mismatches
                                                                                                                                                                                                                                                                                                          43
                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 24, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                            Local Similarity 45.9%;
les 17; Conservative
```

```
MEDLINE=22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from
humans and animals by using a heteroduplex mobility assay and nucleic
acid sequencing based on a small double-stranded RNA element.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
Burkholderiaceae; Ralstonia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shimizu R., Akaishi K., Negishi H., Tanaka H., Ichinose Y., Shiraishi T., Yamada T.; Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AB015669; BAA32212.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10.6%; Score 46; DB 2; Length 49; 36.8%; Pred. No. 2.4e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                          Bukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43 AA; 4766 MW; 1D0A81C41F7BDB35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49 AA; 5166 MW; A416D6945E2E8241 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
ORF 5.
                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 PRONHEDVA--TSPSSPQPAETHPTTLQGAIRREPTSS 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ralstonia solanacearum (Pseudomonas solanacearum).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10.6%; Score 46; DB 2; Le
33.3%; Pred. No. 2e+03;
tive 10; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : || : :::||| | :|||| 37 SVIDLSSDLSNTTDGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                   43 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                   J. Clin. Microbiol. 41:981-992(2003).
EMBL; AY135737; AAN62578.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                           Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                       01-MAR-2003 (TrEMBLrel. 23, Creat
01-MAR-2003 (TrEMBLrel. 23, Last
01-MAR-2003 (TrEMBLrel. 23, Last
Hypothetical protein (Fragment).
Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 25, (TrEMBLrel. 25, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 33.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                         NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Plasmid pJTPS1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q7UVZ0;
01-OCT-2003 (
01-OCT-2003 (
01-OCT-2003 (
                                                                                                                                                                                                                                                                                                                                                                                                                                   NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               082954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07UVZ0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7
                                                     MEDLINE=2251025; Dubmed=12624019;
MEDLINE=2251025; Pubmed=12624019;
MEDLINE=2251025; Pubmed=12624019;
Meolecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
Clin. Microbiol. 41:991-992(2003).
EMBL; AX135729; AAN62570.1; ---
EMBL; AX135734; AAN62570.1; ---
EMBL; AX135734; AAN62576.1; ---
EMBL; AX135738; AAN62576.1; ---
EMBL; AX135738; AAN62576.1; ---
EMBL; AX135738; AAN62576.1; ---
EMBL; AX135738; AAN62576.1; ---
EMBL; AX156778; AAN62576.1; ---
EMBL; AX1766578; AAN62576.1; ---
EMBL; AX1766578; AAN62579.1; ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=T89, and 1962;
MEDLINE=22511025; PubMed=12624019;
MEDLINE=22511025; PubMed=12624019;
Leoni F., Gallinore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Mcrobiol. 41:981-922(2003).
EMBL; AX155730; AAN62571.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 46; DB 2; Length 43;
; Pred. No. 2e+03;
10; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 46; DB 2; Length 43;
Pred. No. 2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein (Fragment).

Cryptosporidium parvum.

Bukaryota, Alveolata; Apicomplexa; Coccidia; Bimeriida;

Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         4736 MW; 1D0A81C40B2A9E35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43 AA; 4766 MW; 1D0A81C40B2A8E34 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YTTDGNDTVTESSDGL----WNNNQTQLFLEHSLLTA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44 YTTDGNDTVTESSDGL --- WNNNQTQLFLEHSLLTA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AY176652; AAO19457.1; -. EMBL; AY135733; AAN62574.1; -. EMBL; AY176654; AAO19459.1; -.
                                                                                                                                                                                                                                                                                                                             AY176657; AA019462.1; -. AY176658; AA019463.1; -. AY176660; AA019465.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                             Hypothetical protein.
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                       43 AA;
                                        SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A
NCBI_TaxID=5807;
```

01-MAR-2003 01-MAR-2003

RESULT (2010) OF 10 OF 1

QBIOR7; QBIOR7

SEQUENCE Query Match

EMBL; EMBL; EMBL;

OX RRY RRY RRY RRY RY DDR DDR DDR DDR FTT SO SO SO

Local

셤

ઠે

2

Gaps

4,

Last sequence update) Last annotation update) Hypothetical protein.

7

Gaps

9

NON TER NON TER SEQUENCE

Query Match

Local

Matches

44

ઠે

8

RESULT

```
Arabidopsis thaliana (Mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.4%;
34.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chilo iridescent virus.";
Virus Genes 17:243-258(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                Tabata S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q91FZ1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291FZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCOORDING TO THE SERVICE SERV
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Э,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                          Gloeckner F.O., Kube M., Bauer M., Teeling H., Lombardot T., Ludwig W., Gade D., Beck A., Borzym K., Heitmann K., Rabus R., Schlesner H., Amann R., Reinhardt R.; "Complete genome sequence of the marine planctomycete Pirellula sp. strain 1.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Saccharomyces cerevisiae (Baker's yeast).
Eukaryota, Fungi, Ascomycota, Saccharomycotina, Saccharomycetes,
                                                                                                                                                                                                                                 MEDLINE=22735913; PubMed=12835416; DOI=10.1073/pnas.1431403100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 16, Created)
(TrEMBLrel. 16, Last sequence update)
(TrEMBLrel. 16, Last annotation update)
thaliana genomic DNA, chromosome 5, P1 clone:MAH20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17;
                                             Bacteria, Planctomycetes, Planctomycetacia, Planctomycetales,
Planctomycetaceae, Pirellula.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=S288C;
Brachat S., Dietrich F.S., Voegeli S., Zhang Z., Stuart L.T.,
Lerch A., Gaffiney T., Philippsen P.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RKSHGLYQPPGVSHGS----HTHP-----KPTPKPLIAFTPSG 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10.5%; Score 45.5; DB 2; Length 48; 25.5%; Pred. No. 2.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52 VTESSDGLW------NNNQTQLFLE------HSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 46; DB 2; Length 50;
Pred. No. 2.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 RONH---EPVATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang Z., Stuart L.T., Dietrich F.S.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AY268135; AAR26281.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 100:8298-8303(2003).
EMBL: BX294137; CAD72581.1; -.
Complete proteome; Hypothetical protein.
SEQUENCE 50 AA; 5329 MW; 264D92R2058AF5F4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EE70B5821E357BFA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Saccharomycetales; Saccharomycetaceae; Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48 AA; 5443 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27, Defective Sdc25p (Fragment)
OrderedLocusNames=RB2360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                              Rhodopirellula baltica.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=4932;
                                                                                                                  NCBI_TaxID=117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-S288C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9FNP3;
01-MAR-2001 (
01-MAR-2001 (
01-MAR-2001 (
Arabidopsis t
(Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9FNP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q6WV04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
06WV04
AC Q6WVO
DT 05-JU
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
Q9FNP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BEATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=93118242; PubMed=1475907;
Somutag K.C., Darai G.,
"Characterization of the third origin of DNA replication of the genome of insect iridescent virus type 6.";
Virus Genes 6:333-342(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sonntag K.C., Schnitzler P., Koonin E.V., Darai G.;
"Chilo iridescent virus encodes a putative helicase belonging to a distinct family within the 'DEAD/H' superfamily: implications for the evolution of large DNA viruses.";
Virus Genes 8:151-158(1994).
                                                                                                                                                                                                                                                                                              "Structural analysis of Arabidopsis thaliana chromosome 5. II. Sequence features of the regions of 1,044,062 bp covered by thirteen physically assigned Pl clones.";

DNA Res. 4:291-300(1997).

EMBL; AB006697; BAB17022.1; -.

NON TER. 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDILINE=94292906; PubMed=8021587; Schnitzler P., Sonntag K.C., Muller M., Janssen W., Bugert J.J., Konnin E.V., Darai G.; Innsect irridescent virus type 6 encodes a polypeptide related to the largest subunit of eukaryotic RNA polymerase II."; Gen. Virol. 75:1557-1567(1994).
                                         core eudicots; rosids;
                                                                                                                                                                                                              MEDLINE=98069011; PubMed=9405937;
Kotani H., Nakamura Y., Sato S., Kaneko T., Asamizu E., Miyajima N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDIANGE-7698884; MEDIANE-95213160; Pubmed-7698884; Sontrag K.C., Schnitzler P., Janssen W., Darai G.; Identification of the primary structure and the coding capacity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ij
                 Embryophyta; Tracheophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDINE=99125223; PubMed=9926400; DOI=10.1023/A:1008017820941;
Muller K., Tidona C.A., Bahr U., Darai G.;
"Identification of a thymidylate synthase gene within the genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chilo iridescent virus (CIV) (Insect iridescent virus type 6). Viruses; dsDNA viruses, no RNA stage; Iridoviridae; Iridovirus. NCBI_TaxID=10488;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 45; DB 2; Length 32;
Pred. No. 1.8e+03;
5; Mismatches 10; Indels
Bukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core er
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32 AA; 3355 MW; 9BBFB0089C72300B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 VPKRSHEEGVTHPSSSSSVAKYP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 LPRONHEPVATSPSSPOPAETHP 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE=94353641; PubMed=8073636;
```

us-10-718-321-6.closed.rup

```
086LU1
                                                                                                                                                                                                                                                 RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          086LU1
  SORFFRES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Identification of genes encoding zinc finger proteins, non-histone chromosomal HWG protein homologue, and a putative GTP phosphohydrolase in the genome of Chilo iridescent virus "; Nucleic Acids Res. 22:158-166(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=89073752; PubMed=3201750;
Fischer M., Schnitzler P., Delius H., Darai G.;
"Identification and characterization of the repetitive DNA element in
the genome of insect iridescent virus type 6.";
Virology 167:485-496(1988).
                                                                                                                                                                                                                                                                                                                                                                                              "Molecular cloning and physical mapping of the genome of insect iridescent virus type 6: further evidence for circular permutation of the viral genome."; Virology 160:66-74(1987).
                                                 SEQUENCE FROM N.A.
MEDLINE-98141693; PubMed=9482589; DOI=10.1023/A:1007932620930;
Bahr U., Tidona C.A., Darai G.;
"The DNA sequence of Chilo iridescent virus between the genome coordinates 0.101 and 0.391; similarities in coding strategy between insect and vertebrate iridoviruses.";
                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=86174607; PubMed=3959991;
Lorbacher de Ruiz H., Gelderblom H., Hofmann W., Darai G.;
Innect iridescent virus type 6 induced toxic degenerative hepatitis in mice.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Identification and mapping of origins of DNA replication within the DNA sequences of the genome of insect iridescent virus type 6.1; Virus Genes 6:19-32(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Handermann M., Schnitzler P., Rosen-Wolff A., Raab K., Sonntag K.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99383793; PubMed=10456793; DOI=10.1023/A:1008072319875; Muller K., Tidona C.A., Darah G.; Medentification of a gene cluster within the genome of Chilo iridescent virus encoding enzymes involved in viral DNA replication
                                                                                                                                                                          Delius H., Darai G., Fluegel R.M.; "DNA analysis of insect iridescent virus 6: evidence for circular permutation and terminal redundancy.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=93360401; PubMed=8492091; Stohwasser R., Raab K., Schnitzler P., Janssen W., Darai G.; Stohwasser R., the gene encoding the major capsid protein of insect iridescent virus type 6 by polymerase chain reaction."; J. Gen. Virol. 74:873-879(1993).
the genome of insect iridescent virus type 6 between the genome coordinates 0.310 and 0.347 (7990 bp)."; Intervirology 37:287-297(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=94167241; PubMed=8121799;
Schnitzler P., Hug M., Handermann M., Janssen W., Koonin E.V.,
Delius H., Darai C.;
                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDILNE-87321126; PubMed=2820141;
Schnitzler P., Schau J.B., Fischer M., Reisner H., Scholz J.,
Delius H., Darai G.;
                                                                                                                                                                                                                                                                                                                  Med. Microbiol. Immunol. 175:43-53 (1986)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=92196996; PubMed=1549908;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and processing.";
Virus Genes 18:243-264(1999)
                                                                                                                                                                                                                     J. Virol. 49:609-614(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE PROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Darai
```

```
.;
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
MEDINE=21342589; PubMed=11448171; DOI=10.1006/viro.2001.0963;
Jakob N.J., Muller K., Bahr U., Darai G.;
"Analysis of the first complete DNA sequence of an invertebrate iridovirus: coding strategy of the genome of Chilo iridescent virus."; Virology 286:182-196(2001).
SEMBL; AF303741; AAK82041.1; -.
SEQUENCE 49 AA; 5458 MM; 744BBC427658D078 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-22511025; PubMed=12624019;
Leoni F., Gallimore C.I.; Green J., McLauchlin J.;
Leoni F., Gallimore C.I.; Green J., McLauchlin J.;
Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-992(2003).
EMBL; AY17661; AA019466.1; -.
Hypothetical protein.
1
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                        11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                       10.3%; Score 44.5; DB 2; Length 49; 31.9%; Pred. No. 3.3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 44.5; DB 2; Length 49;
Pred. No. 3.3e+03;
4; Mismatches 17; Indels
                                                                                                                                                                                                                                                      16; Indels
                                                                                                                                                                                                                                                                                                          37 TSSPLY---SYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AY118212; AAAM78572.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 PTTLQGAIRREPISSPLYSYTTDGNDTVTESSDGLWNNQTQL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PITT--ATTKITIT---VSTTTPKADVVNBISSCVKNNNCTGL 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49 AA; S101 MW; 86D35EEB15D4FC94 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope glycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                        5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2003 (TrEMBLrel. 24, Created) 01-JUN-2003 (TrEMBLrel. 24, Last seq 01-JUN-2003 (TrEMBLrel. 24, Last ann Hypothetical protein (Fragment). Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39.5%;
                                                                                                                                                                                                                              31.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                            Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08J4I5
Q8J4I5;
```

```
7
                                                       4; Gaps
                              Query Match 10.2%; Score 44; DB 2; Length 43; Best Local Similarity 33.3%; Pred. No. 3.2e+03; Matches 12; Conservative 9; Mismatches 11; Indels
NON TER 43 43 43 130461240B2A9E35 CRC64;
                                                                         S S
                                                                              8 8
```

Search completed: June 29, 2005, 09:46:13 Job time : 49.8546 secs

circus spil accipiter g milvus migr

human immun prochloroco

chimpanzee

chry

aquila

086238 086239 081748 081748 081748 081747 071827 071827 071827 071827 071827 071827 071827 071827 071827 071827

human rotav homo sapien wheat dwarf wheat dwarf wheat dwarf accipiter n

human rotav

Perfect score:

Sequence:

OM protein

Run on:

Scoring table:

Searched:

Database

Result

```
Leoni F., Gallimore C.I., Green J., McLauchlin J.;

"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";

J. Clin. Microbiol. 41:981-992(2003).

EMBL; AX176656; AA019461.1;

Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=1005, 1034, 1283, and 340;
MEDLINE=22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Alveolata, Apicomplexa, Coccidia, Bimeriida,
Cryptosporidiidae, Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypotherical protein (Fragment).
Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43 AA; 4750 MW; 1D0A81C40B323D35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update) Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20.9%; Score 47; DB 2; Le 33.3%; Pred. No. 1.3e+02; ive 10; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : || : :: :: || | : || : || : || 3 FVTDLSSDLSNTADGLGQAW-YKISQVAIEHIILTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                         Q86239
Q71V48
Q8UYK0
Q8UYK4
Q7SZV6
Q7SZK0
Q7SZK2
Q7SZK2
Q7SZK2
Q7SZK4
Q7SZYK4
Q7SZK4
Q7SZXK4
Q7SZXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=870;
MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                    27V009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2003 (TrEMBLrel. 24,
      Local Similarity 33.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QBIOR6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QBIORG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
Q86LU3
ID Q86LU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2
Q810R6
ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                saccharomyc
cryptospori
cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   simian t-ly
cryptospori
homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chimpanzee
mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dictyosteli
human rotav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coxiella bu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chilo iride
gnetum gnem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human t-lym
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 turkey ente
vibrio chol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human immun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human rotav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cryptospori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mannheimia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurospora
                                                                                                                                                                                                      June 29, 2005, 09:09:20 ; Search time 25.332 Seconds (without alignments) 849.017 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     neisseria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                             1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                086wv04
086lu1
086lu1
0814i5
0814i5
086lu2
086lu3
086lu3
086lu3
077xy8
077xy8
077xy8
077xy8
077xx5
077xx5
0916x1
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9r5w5
Q86237
                            GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1612378 segs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                protein search, using sw model
                                                                                                                                                                                                                                                                                                                US-10-718-321-6_COPY_40_
225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q810R6
Q810R7
Q800R04
Q800B1
Q86LU1
Q86LU5
Q99JT4
Q98JU5
Q86LU5
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07XA54
082209
099855
09XT75
07XD73
065SH0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q78501
Q9R5W5
Q86237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UniProt 03:*
1: uniprot sprot:*
2: uniprot trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match Length DB
                                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0 Maximum DB seq length: 50
```

;;

Gaps

4

42 42 41.5

43.5

42.5

40.5 40 39.5 39

38.5 38.5 38.5

```
Cryptosporidium parvum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-S288C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-S288C
                                                                                                                                                                                                                                                                                                                                                                                                                                NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q6WV04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
0861JJ
1D 0861J
DT 01-0J
DT 01-J
DT HYPOI
OS CYYPI
OC BUKAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
;
humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";

J. Clim. Microbiol. 41:881-992(2003).

EMBL; AY135729; AAN62570.1; -.

EMBL; AY135734; AAN62570.1; -.

EMBL; AY135734; AAN62576.1; -.

EMBL; AY135738; AAN62576.1; -.

EMBL; AY176655; AAO19460.1; -.

EMBL; AY176658; AAO19462.1; -.

EMBL; AY176668; AAO19463.1; -.

EMBL; AY176660; AAO19463.1; -.

EMBL; AY176660; AAO19463.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Leoni F., Gallimore C.I., Green J., McLauchlin J.,

"Molecular epidemiological analysis of Cryptosporidium isolates from
"Molecular epidemiological analysis of Cryptosporidium isolates from
humans and animals by using a heteroduplex mobility assay and nucleic
acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-992(2003).

EMBL; AX135730; AAN62571.1;

EMBL; AX135733; AAN62574.1;

EMBL; AX176654; AAO19459.1;

EMBL; AX176654; AAO19459.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20.4%; Score %v, 33.3%; Pred. No. 1.7e+02; rive 10; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidlidae, Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               43 AA; 4736 MW; 1D0A81C40B2A9E35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43 AA; 4766 MW; 1D0A81C40B2A8E34 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 27, Last annotation update)
. protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : || : :::|| : || || EVIDLSSDLSNTADGLGOAW-YKISOVIVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 46; DB 2; I Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last seq
01-MAR-2003 (TrEMBLrel. 23, Last ann
Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN=T89, and 1962;
MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Similarity 33.39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 33.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                    Hypothetical protein.
NON TER 1 1
NON TER 43 43
SEQUENCE 43 AA; 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAR-2003 (7
05-JUL-2004 (7
Hypothetical F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q8ISB4 P Q8ISB4; 01-MAR-2003 (01-MAR-2003 (01-MAR-2003 (01-MAR-2003 (01-MAR-2003 (01-MAR-2003 (001-MAR-2003 (001-M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q810R7
Q810R7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      datches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
Q81SB4
ID Q81SI
AC Q81SI
DT 01-M
DT 01-M
DT 01-M
DE HYPOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
10 20107
10 AC 0810
DT 01-M
D
               ò
```

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
;
                                                                                                                SEQUENCE FROM N.A.
MEDLINE=22511025; PubMed=12624019;
MEDLINE=22511025; PubMed=12624019;
Meloni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-922(2003).
EMBL, AX135737, AAN62578.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Saccharomyces cerevisiae (Baker's yeast).
Bukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brachat S., Dietrich F.S., Voegell S., Zhang Z., Stuart L.T., Lerch A., Gaffney T., Philippsen P., Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20.2%; Score 45.5; DB 2; Length 48; 25.5%; Pred. No. 2.2e+02; ive 9; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20.4%; Score 46; DB 2; Length 43; 33.3%; Pred. No. 1.7e+02; ive 10; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 VTESSDGLW-------HSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhang Z., Stuart L.T., Dietrich F.S.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY268135; AAR26281.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q86LU1 PRELIMINARY; PRT; 43 AA.
Q86LU1;
Q1-UNN-2003 (TrEMBLrel. 24, Last sequence update)
01-UNN-2003 (TrEMBLrel. 24, Last annotation update)
4)Typothetical procein (Fragment).
Cryptosporidium partvum.
Cryptosporidium partvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Bukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                               43 43 AA; 4766 MW; 1D0A81C41F7BDB35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 AA; 5443 MW; EE70B5821E357BFA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : || : :::||| :||| 37
3 FVTDLSSDLSNTTDGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Defective Sdc25p (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

```
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                              19.6%;
48.0%;
                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 48.v.,
--hes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                            Envelope protein.
NON_TER 1
NON_TER 46
SEQUENCE 46 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-2002
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q8J4I5
Q8J4I5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         099JT4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
Q99JT4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08J4IS
         RAR RAR RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S TTWENT AND CONTRACT OF THE STATE OF THE ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-22511025; PubMed=12624019; McLauchlin J.; Mallimore C.I., Green J., McLauchlin J.; Mallimore C.I., Green J., McLauchlin J.; Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element."; J. Clin. Microbiol. 41:881-992(2003). BMBL, AX176647; AA019452.1; -...
                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 44; DB 2; Length 43;
Pred. No. 3e+02;
9; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
19.6%; Score 44; DB 2; Length 43;
Best Local Similarity 29.7%; Pred. No. 3e+02;
Matches 11; Conservative 11; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota, Alveolata, Apicomplexa, Coccidia, Bimeriida,
Cryptosporidiidae, Cryptosporidium.
NCBI_TaxID=93969;
                                                                                                                                                                                                                                                                                                                                                                                                                   43 43 43
43 AA; 4770 MW; 130461240B2A9E35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 AA; 4812 MW; FD31E1C40B323830 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Envelope glycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 YTTDGNDTVTESSDGL----WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : || : ::||| : :||| 37 SUTDLSSDLANTADGLGQAWYKISQTE--IEHIIMTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : || : : || : : || || 37
3 FVTDLSSDFSNTADGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                 MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein (Fragment). Cryptosporidium meleagridis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [1]
SEQUENCE FROM N.A.
                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8J4I8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08J4I8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                986LU6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
0861U6
0861U6
0961U-1
01-J
07 01-J
07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
08J418
1D 08J4
AC 08J4
DT 01-0
DT 01-0
DT 01-0
OC VITMO
      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=FVB/N; IISSUE-Mammary tumor. C3;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                  Score 44; DB 2; Length 46;
Pred. No. 3.3e+02;
2; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19.6%; Score 44; DB 2; Length 49; 48.0%; Pred. No. 3.5e+02; ative 2; Mismatches 11; Indels
[1]
SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Trichel A.M. Rajakumar P.A., Murphey-Corb M.A.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AX118209; AAM78569.1; -.
GO: GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AY118212; AAM/18572.1;
GO, GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                             46 46
46 AA; 4928 MW; 9A2C139D4777658E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49 AA; 5101 MW; 86D35EEB15D4FC94 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 25, Last annotation update)
Hypothetical protein.
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 22, Last sequence update) (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruees, Retroid viruses; Retroviridae; Lentivirus
NCBI TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 SYTTDGNDTVTESSDGLWNNNQTQL 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 STITPKADVVNETSSCVKNNNCTGL 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 SYTTDGNDTVTESSDGLWNNNQTQL 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STITPKADVVNETSSCVKNNNCTGL 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-2002 (TrEMBLrel. 22, Created)
```

```
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-992(2003).

EMBL; AX176649; AAO19454.1;
Hypothetical protein.
               01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Hypothetical protein (Fragment).
Cryptosporidium felis.
Eukaryota, Juveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                               43 AA; 4812 MW; 1C4F81C40B2A9B21 CRC64;
 01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 : || : :::||| | ::||| 37 SUTDLSSDLSNTADGLGQAW-YKISQVEVEHIIMTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                              5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                               Score 43; DB 2;
Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                 MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                 19.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Virology 198:297-310(1994).
EMBL; L20351; AAA16596.1; -.
PIR; A49281; A49281.
                                                                                                                                                                                                                                                                                                                                                                                                11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pol protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
es 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46 AA;
                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=33747;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1996
                                                                                                                                                   STRAIN=355;
                                                                                                                                                                                                                                                                                                NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              088390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
Q88390
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
           Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Vilalano D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakeeley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalaka U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leoni F., Gallimore C.I., Green J., McLauchlin J.,
"Molecular epidemiological analysis of Cryptosporidium isolates from
humans and animals by using a heteroduplex mobility assay and nucleic
acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-922 (2003).
EMBL; AX176659; AAO19464.1;
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.
                                                                                                                                                                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4;
                                                                                                                                                                                                                                                                                                                                                                               19.3%; Score 43.5; DB 2; Length 41; llarity 31.6%; Pred. No. 3.3e+02; Conservative 3; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                 Strausberg R.;
Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukāryota, Alveolata, Apicomplexa, Coccidia, Bimeriida,
Cryptosporidiidae, Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                  7692D458655D3B05 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43
4754 MW; 249A01240B2A9E26 CRC64;
                                                                                                                                                                                                and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrEMBLrel. 24, Created)
(TrEMBLrel. 24, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 LYLLRLDANHTIL----LWSKNYKCLGTNHGLKVARS 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 43; DB 2; Len
Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : || : ::||| | : |||| 37 FVTDLSSDFANTADGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8; Mismatches
                                                                                                                                                                                                                                                                  STRAIN=FVB/N; TISSUE=Mammary tumor. C3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein (Fragment).
Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19.1%;
33.3%;
                                                                                                                                                                                                                                                                                                                                                  41 AA; 4720 MW;
                                                                                                                                                                                                                                                                                                                EMBL; BC005705; AAH05705.1;
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 12; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                 SEQUENCE FROM N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2003
01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=1059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q86LU2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
```

., 2

Gaps

4,

Length 43; 10; Indels

```
5
                                                                                                                                                                                                                                                                               MEDLINE=94082462; PubMed=8259665; Sakenano B., Diop O.M., Sakesna N.K., Herve V., Durand J.P., LeGuenno B., Diop O.M., Digoutte J.P., Mathiot C., Muller M.C., Love J.L., Benz P.M., Erensoy S., Barre-Sinoussi F., Poiesz B.J.; Sakerepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukemia viruses (STLV-I) from various naturally infected monkey species from central and western Africa."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      э,
Э
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 42.5; DB 2; Length 46;
Pred. No. 5.1e+02;
3; Mismatches 14; Indels
                                                                                                                                                                 Simian T-lymphotropic virus 1.
Viruses; Retroid viruses; Retroviridae; Deltaretrovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5357 MW; 741682B6E7330E51 CRC64;
                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ą.
46 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 LYKYFTDKPDLPMDNALSIGLWTFNHLNV-LTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 LYSYTTDGNDTVTES -- SDGLWNNQTQLFLEH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43
                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2003 (TrEMBLrel. 24, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q86LU4
Q86LU4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
Q86LU4
ID Q86LU
AC Q86LU
DT 01-JU
```

\$

43

01-JUN-2003 (TrEMBLrel. 24, Created)

PRELIMINARY;

Q86LU5;

```
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                MEDLINE-22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Leoni F., Gallimore C.I., Green J., McLauchlin a solution and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-992(2003).
Hypothetical AAO19456.1;
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypotherical protein (Fragment).
Hypotherical protein (Fragment).
Homo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 42; DB 2; Length 46;
Pred. No. 5.9e+02;
5; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Keen T.J.;
Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
EMBL, UB5997; AAB46606.1; -.
Hypothetical protein.
                                                                                    Cryptosporidium felis.

Bukaryota; Alveolata; Apicomplexa; Coccidia; Bimeriida;

Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43 AA; 4798 MW; CBIF81C40B323833 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE 46 AA; 5123 MW; 64D4B2844B295426 CRC64;
01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : || : : : :||| | :|| 37
3 FVTDLSSDLSNTADGLGQAW-YKISQAEIEHIIMTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18.7%; Score 42; DB 2; I
30.6%; Pred. No. 5.5e+02;
tive 10; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 GNDTVTES--SDGLWNNNOTQLFLEHSLLTANTTK 41
                                                                  Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 34.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q7KYS6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
77878
AC 077878

   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
```

g

Search completed: June 29, 2005, 09:46:14 Job time: 26.332 secs

THE STATE OF THE S

162, App 162, App 162, App 236, App 236, App 236, App 236, App 18, App 76, App 76, App 76, App 76, App 9, App 9, App

Sequence Sequence Sequence Sequence Sequence Sequence

Sequence 3 Sequence 3 Sequence 2 Sequence 2

ALIGNMENTS

Sequence 1 Sequence 1 Sequence 1

Sequence Sequence Sequence

Seguence

Run on:

```
Sequence 471.
Sequence 472.
Sequence 473.
Se
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 470, Application US/09282029A
Patent No. 6723700
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Blaschuk, Orest W.
APPLICANT: Gour, Barbara J.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING CLAUDIN-MEDIATED
TITLE OF INVENTION: PUNCTIONS
FILE REFERENCE: 100086,409C1
CURRENT FILING DATE: 1999-03-30
NUMBER OF SEQ ID NOS: 480
SSEQ ID NO 470
LENGTH: 30
                                              US-08-190-802A-162
US-08-477-346-162
US-08-477-346-162
US-08-190-802A-162
US-08-190-802A-236
US-08-477-346-236
US-08-477-346-236
US-08-473-092-236
US-08-437-9430-76
US-08-749-526-5
US-08-749-526-5
US-08-749-526-5
US-08-749-526-5
US-08-749-526-5
US-08-749-526-5
US-08-749-530-34
US-08-875-5530-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 48; DB 4
Pred. No. 10;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21.3%; Score 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 LWNNNQTOLFLEHSLLTANTT-KG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
21.3%;
Best Local Similarity 45.8%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Mus musculus
US-09-282-029A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapien
JS-09-282-029A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-282-029A-471
                                                                                                                                                                                                                                         37.5
37.5
37.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
쇰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22, Appl
22, Appl
22, Appl
244, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 244, App
244, App
65, Appl
16, Appl
16, Appl
16, Appl
16, Appl
4, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6, Appli
6, Appli
6, Appli
9, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 471, App
Sequence 471, App
Sequence 470, App
                                                                                                              June 29, 2005, 09:33:11; Search time 7.59136 Seconds (without alignments) 413.004 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence (Sequence 1 Sequence 1 Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1
Sequence 1
Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
                                                                                                                                                                                                     225
1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-190-802A-123
US-08-477-346-123
US-08-477-089-123
US-08-487-072A-123
US-08-188-228-20
                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                            513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                 protein search, using sw model
                                                                                                                                                                                    US-10-718-321-6 COPY 40
                                                                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 0
seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42
42
41.5
                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                 OM protein
                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
```

Result Š ñ

Gaps

4

Indels

4.

DB 4; Length 30;

4; Length 30;

```
90909
                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-332-643-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-188-228-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4

US-09-434-355A-471

is Sequence 471, Application US/09434355A

is Sequence 471, Application US/09434355A

is Sequence 471, Application US/09434355A

is Patent No. 6830694

is GENERAL INFORMATION:

is APPLICANT: Dames Mathew Symonds

APPLICANT: Games Mathew Symonds

APPLICANT: Gour, Barbara J.

ITILE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING CLAUDIN-MEDIATED

ITILE OF INVENTION: FUNCTIONS

ITILE REFERENCE: 100086.409C2

CURRENT APPLICATION UNDBER: US/09/434,355A

CURRENT FILING DATE: 1999-11-03

NUMBER OF SEQ ID NOS: 531

is SOFTWARE: PatentIN Ver. 2.0

is SEQ ID NO 471

LENGTH: 30
                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                Sequence 470, Application US/09434355A
Patent No. 6830894
GENERAL INFORMATION
APPLICANT: Blaschuk, Orest W.
APPLICANT: James Mathew Symonds
APPLICANT: James Mathew Symonds
APPLICANT: Gour, Barbara J.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING CLAUDIN-MEDIATED
TITLE OF INVENTION: FUNCTIONS
FILE REFERENCE: 100086.409C2
CURRENT APPLICATION NUMBER: US/09/434,355A
CURRENT PILING DATE: 1999-11-03
NUMBER OF SEQ ID NOS: 531
SOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21.3%; Score 48; DB 4; Length 30; illarity 45.8%; Pred. No. 10; Conservative 5; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21.3%; Score 48; DB 4; Length 30; 45.8%; Pred. No. 10;
                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Indels
Best Local Similarity 45.8%; Pred. No. 10; Matches 11; Conservative 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Mismatches
                                                                  20 LWNNNQTQLFLEHSLLTANTT-KG 42
                                                                                           2 MW---QVTAFLDHNIVTAQTTWKG 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 LWNNNQTQLFLEHSLLTANTT-KG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 MW---QVTAFLDHNIVTAQTTWKG 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 LWNNNQTQLFLEHSLLTANTT-KG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 22, Application US/08188228
; Patent No. 5597725
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , ORGANISM: Homo sapien
US-09-434-355A-471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 11; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-434-355A-470
                                                                                                                                                                                                  US-09-434-355A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 45.5; DB 1; Length 40; Pred. No. 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------SSLESGTTEG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22, Application US/08332643
Patent No. 5639634
GENERAL INFORMATION:
APPLICANT: SUZUKI, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESSE:
ADDRESSEE: Bicknall, O'Toole, Gerstein, Murray &
ADDRESSEE: Bicknall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: Two First National Plaza, 20 South Clark STREET: Street
                       CADHERIN MATERIALS AND METHODS
                                                                                                                                                                                                                                                                                                        SUFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,228
FILING DATE:
APPLICANT: Suzuki, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHOD
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PatentIn Release #1.0, Version #1.25
                                                                                                                                  6300 Sears Tower, 233 S. Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/049,460
FILING DATE: 19 APR 1993
PRIOR APPLICATION NUMBER: US 07/872,643
APPLICATION NUMBER: US 07/872,643
FILING DATE: 17 APR 1992
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5597725and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31340
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (312) 474-6300
TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | :| :|||:| ||
LATYAYEGNDSVAESL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 20.2%;
Best Local Similarity 31.7%;
Matches 13; Conservative 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                       CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :|: ||: ||: || || || :|: 10 AYSPDGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 244, Application US/08477346; Patent No. 6262023
                                                                                                             Query Match
20.2%;
Best Local Similarity 31.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 40.37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ropology: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                      ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-332-638-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE: NO
ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-477-346-244
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 20.2%; Score 45.5; DB 1; Length 40; Best Local Similarity 31.7%; Pred. No. 32; Matches 13; Conservative 5; Mismatches 8; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 LATYAYEGNDSVAESL------SSLESGTTEG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/32,638
FILING DATE: 01-NOV-1994
CLASSIFICATION DATA:
APPLICATION NUMBER: US 07/872,643
FILING DATE: 17 APR 1992
APPLICATION NUMBER: US/08/049,460
FILING DATE: TAPR 1992
APPLICATION NUMBER: US/08/049,460
FILING DATE: NUMBER: US/08/049,460
FREFERRENCE/DOCKET NUMBER: 31340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22, Application US/08332638
Patent No. 5646250
BARBAL INPORMATION:
APPLICANT: Suzuki, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray ADDRESSEE: Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6300 Sears Tower, 233 S. Wacker Drive
                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: NO. 5639634and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/POCKET NUMBER: 27866/30795
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 346-5750
TELEFRA: (312) 984-9740
TELER: 25-3856
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,643
                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/872,643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-6448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                             / MOLECULE TYPE: protein US-08-332-643-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Abba.
STREET: 630.
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Illi
COUNTRY: US
ZIP: 60606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
US-08-332-638-22
```

```
ä
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
..
Score 45.5; DB 1; Length 40; Pred. No. 32; 5; Mismatches 8; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19.8%; Score 44.5; DB 1; Length 31; 40.9%; Pred. No. 31;
                                                                                                                                                                                                                                              US-08-190-802A-244
; Sequence 244, Application US/08190802A
; Patent No. 5519003
; Patent No. 5519003
; APPLICANT: Mochly-Rosen, Daria
APPLICANT: Ron, Dorit
; TITLE OF INVENTION: WD-40 - Derived Peptides and Uses
; TITLE OF INVENTION: Thereof
; VORRESPONDENCE ADDRESS:
; CORRESPONDENCE ADDRESS:
; ADDRESSEE Dehlinger & Associates
; STREET: P.O. BOX 60850
; CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                             2 LATYAYEGNDSVAESL-----SSLESGTTEG 27
                                                                                                2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATION SYSTEM: rc_busyms_bus
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,802A
FILING DATE: 01-FEB-1994
FLING DATE: 01-FEB-1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Fablan, Gary R.
REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 8600-0139
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0860
INFORMATION FOR SEQ ID NO: 244:
SEQUIBNE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
US-08-190-802A-244
```

```
SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/473,089
FILING DATE: 07-JUN-1995
                                                        FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/ABENT INFORMATION:
NAME: WURASHIGE, KATE H.
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 2550-0025.22
FELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (202) 887-0763
INFORMATION FOR SEG ID NO: 244:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Morrison & Poerster
STREET: 2000 Pennsylvania Avenue, NW
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                           ) ORIGINAL SOURCE:

; INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
US-08-473-089-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-487-072A-244
; Sequence 244, Application US/08487072A
; Patent No. 6423684
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 AYSPDGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (202) 887-1500
TELEFAX: (202) 887-0763
INFORMATION FOR SEQ ID NO: 244
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19.8%;
ilarity 40.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 SYTTDGNDTVTESSDG-
                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
                                                                                                                                                                                                                                                                                                       TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
hes 9; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                        ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08473-089-244

i Sequence 244, Application US/08473089

j Patent No. 634258

i GENERAL INFORMATION:

APPLICANT: Mochly-Rosen, Daria

APPLICANT: Ron, Dorit

TITLE OF INVENTION: Wb-40 - Derived Peptides and Uses

TITLE OF INVENTION: Thereof

NUMBER OF SEQUENCES: 265

CORRESPONDENCE ADDRESS:

ADDRESSEE: MORTISON & Poerster

STREET: 2000 Pennsylvania Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; Indels
      APPLICANT: Mochly-Rosen, Daria
APPLICANT: Ron, Dorit
TITLE OF INVENTION: WD-40 - Derived Peptides and Uses
TITLE OF INVENTION: Thereof
NUMBER OF SEQUENCES: 265
ADDRESSEE: Morrison & Foerster
                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/477,346

FILING DATE: 07-JUN-1995

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/487,072

FILING APPLICATION DATA:

APPLICATION NUMBER: 08/487,072

FILING APPLICATION NUMBER: 29,959

REFERENCE/DOCKET NUMBER: 25,959

REFERENCE/DOCKET NUMBER: 25,959

TELEPHONE: (202) 887-1500

TELEPHONE: (202) 887-10763

INFORMATION FOR SEQ ID NO: 244:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 44.5; D
Pred. No. 31;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANTI-SENSE: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
                                                                                                                                               STREET: 2000 Pennsylvania Avenue, NW
CITY: Washington
                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19.8%;
                                                                                                                                                                                                     COUNTRY: USA
ZIP: 20006-1812
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 40.9°
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 20006-1812
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 2000 Peni
CITY: Washington
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-477-346-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
Gaps
                                                     ë.
     DB 3; Length 31;
                                                  Indels
                                                                                                                                                                                                                                                                                                                                    APPLICANT: Mochly-Rosen, Daria
APPLICANT: Ron, Dorit
TITLE OF INVENTION: WD-40 - Derived Peptides and Uses
TITLE OF INVENTION: WD-80
TITLE OF INVENTION: 265
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATE:

APPLICATION NUMBER: US/08/487,072A

FILING DATE: 07-JUN-1995

CLASSIFICATION: 514

ATTORNEY/AGENT INFORMATION:

NAME: MURASHIGE, KATE H.

REFERENCE/DOCKET NUMBER: 25.999

REFERENCE/DOCKET NUMBER: 25.999

TELECOMMUNICATION INFORMATION:
                                                  2
Score 44.5; DE pred. No. 31; 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide HYPOTHETICAL: NO
```

```
90909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-332-643-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-188-228-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                            Sequence 65, Application US/08218025A
Patent No. 5556744
GENERAL INFORMATION:
APPLICANT: Weiner, David B.
APPLICANT: Williams, William V.
TITLE OF INVENTION: Methods and Compositions for Diagnosing
TITLE OF INVENTION: and Treating Certain HIV Infected Patients
NUMBER OF SEQUENCES: 197
                                                                                                                                        3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8;
                                                                                                 DB 4; Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 44; DB 1; Length 20; Pred. No. 21;
                                                                                                                                        5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/218,025A
FILING DATE: 24-MAR-1994
PRIOR APPLICATION 1424
PRIOR APPLICATION NUMBER: US 07/891,451
FILING DATE: 29-MAY-1992
ATTONENEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: P.O. Box 457, 321 No. 5556744ristown Road
CITY: Spring House
                                                                                                                                        5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Mismatches
                                                                                                 19.8%; Score 44.5; I
40.9%; Pred. No. 31;
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
US-08-487-072A-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 PLYSYTTDGNDTVTESSDGLWNN 23
                                                                                                                                                                            4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Bak, Mary E. REGISTRATION NUMBER: 31,215
REFERENCE, DOCKET NUMBER: WST33A
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                    : |: || | | | : |:
10 AYSPDGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16, Application US/08188228; Patent No. S597725; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (215) 540-9206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 39.1%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (215) 540-5818
INFORMATION FOR SEQ ID NO: (SEQUENCE CHARACTERISTICS: LENGTH: 20 amino acids
                                                                                                                   Best Local Similarity 40.9
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: Pennsylvania
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||::| :||:|
PLFNSTWNGNNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 19477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                          RESULT 12
US-08-218-025A-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-218-025A-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
US-08-188-228-16
                                                                                                 Query Match
                                                                                                                                                                              ò
                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.7%; Score 42; DB 1; Length 40;
nilarity 39.1%; Pred. No. 94;
Conservative 5; Mismatcher
APPLICANT: Suzuki, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Bicknell, STREET: Two First National Plaza, 20 South Clark STREET: Street
CITY: Chicago
STATE: 111nois
CONTRY: USA
ZIP: 60603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 16, Application US/08332643
Patent No. 5639634
GENERAL INFORMATION:
APPLICANT: SYZUKİ, SHINTARO
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
                                                                                       ADDRESSEE: Marshall, O'Toole, Gerstein, Murray ADDRESSEE: Borun
                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
GURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patentin Release #1.0, Version #1.25
                                                                                                                                STREET: 6300 Sears Tower, 233 S. Wacker Drive CITY: Chicago STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
CLASSIPICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/049,460
FILING DATE: 19 APR 1993
PRIOR APPLICATION NUMBER: US 07/872,643
FILING DATE: 17 APR 1992
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5597725and, Greta E.
REGISTRATION NUMBER: 35,302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 LYSYTTDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CAMPUTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                  COUNTRY: USA
```

ö

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 39.1%; Pred. No. 94;
Matches 9; Conservative 5; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
UG-08-332-638-16
Sequence 16, Application US/08332638
Fatent No. 5646250
GENERAL INFORMATION:
APPLICANT: SULUKI, Shintaro
TITLE OF INVENTION:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 6606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BATCH COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHTION DATA:
APPLICATION NUMBER: US/08/332,638
FILING DATE: 01-NOV-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Mismatches
                                                                                                     FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/07/872,643

FILING DATE:

NAME: No. 563634and, Greta E.

REGISTRATION NUMBER: 35,302

REGISTRATION NUMBER: 35,302

REFERENCE/DOCKET NUMBER: 27866/30795

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELEFAX: (312) 346-5750

TELEFAX: (312) 346-9740

TELEX: 25-3856

INFORMATION FOR SEQ ID NO: 16:

SEQUENCE CHARACTERISTICS:

LENGTH: 40 amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: ACCOUNT TO AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR AFFLICATION DAMER: US 7/872,643
PILING DATE: 17 APR 1992
APPLICATION NUMBER: US/08/049,460
FILING DATE: 17 APR 1992
APTORNEY/AGENT INFORMATION:
NAME: No. 5646250and, Greta E.
RECISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31340
TELECPHONE: (312) 474-6300
TELECPHONE: (312) 474-6448
TELEFAX: 25-3856
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,643
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 LYSYTTDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-332-643-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ö

```
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                  Copyright
```

OM protein - protein search, using sw model

Run on:

June 29, 2005, 09:27:45 ; Search time 44.6208 Seconds (without alignments) 720.211 Million cell updates/sec

US-10-718-321-7 1749

Title: Perfect score:

1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRE 334 Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

11837 Total number of hits satisfying chosen parameters:

283416 seqs, 96216763 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 50

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
1: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		d			SUMMARIES	
Result No.	Score	Query Match	Length	DB	ID	Description
	59	3.4	42	7	170082	glycoprotein Ib al
7	26	3.2	43	~	JU0404	hypothetical 5.2K
m	55	3.1	40	~	B69408	hypothetical prote
4	53.5	3.1	46	N	S07073	r
2	20	2.9	34	~	D81044	hypothetical prote
9	49	2.8	25	(7	140692	
7	49	2.8	42	~	T07030	extensin - tomato
8	49		45	~	H44530	T-cell receptor al
6	48.5	2.8	27	~	A90629	thr operon leader
10	48.5		27	~	A85480	thr operon leader
11	47.5		47	~	AE3429	hypothetical prote
12	47	2.7	20	~	138970	fibroblast growth
13	46	5.6	46	N	F81142	hypothetical prote
14	45.5	5.6	20	ď	A85902	hypothetical prote
15	45		35	~	S20766	Ig heavy chain V r
16	45		47	~	B81103	hypothetical prote
17	44.5		29	~	C61384	trachael mucin gly
18	4.		44	~	S11110	'n
19	44.5		20	~	AH2135	hypothetical prote
20	43.5		41	~	S38918	
21	٠		49	~	S49365	u
22	43		28	N	PH1363	Ig heavy chain DJ
23	43		31	~	T29628	hypothetical prote
24	43		32	7	S58524	alpha-complex prot
25	43		35	7	S30112	aminoglycoside N6'
56	43		41	7	D45495	beta-defensin-4 -
27	43	2.5	41	~	C30208	hypothetical prote
28	43		43	~	S49760	
59	43		43	~	B42057	fibroblast growth

ä

Gaps 4,

Query Match
3.2%; Score 56; DB 2; Length 43;
Best Local Similarity 40.0%; Pred. No. 1.5e+03;
Matches 12; Conservative 5; Mismatches 9; Indels

fibroblast growth nitrate reductase	Ig heavy chain V r	nyponnerical proce pol protein - simi	neural cell adhesi	T-cell receptor be	fibronectin, splic	hypothetical prote	4.8K nonstructural	Ig heavy chain V r	defensin AMP1 - Cl	t-complex polypept	collagen alpha 1(X	hypothetical prote	microbial serine p
A41266 A47694	S33406	A95035 A49281	S25433	141299	I52394	C87603	B46346	PL0096	866219	B49410	A37172	E97596	PQ0104
00 00	0	N 64	~	~	~	~	~	~	~	~	~	7	7
47 50	40	44	40	22	28	41	45	49	49	20	36	37	41
10.10	T		4		4	**	_	_			4	4	4
-: -:	٠.		٠.	٦.	٦.	٦.	٦.	٦,	٧.	٦,		•	
0 0	, i	4. 4.	, ,	7.	~	7	7.	7	7.	7.	2	4	'n
43 2.		42.5		42 2.4	42 2.	42 2.	42 2.4	42 2.4	42 2.4	42 2.4	41.5 2.	41.5 2.	41.5 2.

ALIGNMENTS

```
Jycoprotein Ib alpha variant B - human (fragment)
C;Species: Homo sapiens (man)
C;Accession: I70082
A;Title: Polymorphism of human glycoprotein Ib alpha results from a variable number of teations.
A;Reference number: I55355; MUID:92250564; PMID:157776
A;Reference number: I55355; MUID:92250564; PMID:157776
A;Reference number: Homo sapiens (man)
A;Reference number: Homo sapiens (man)
A;Residues: I-42 cRES>
A;Cessains: Homo sapiens (man)
A;Residues: Homo sapiens (man)
A;Residues: Homo sapiens (man)
A;Residues: Homo sapiens (man)
A;Cross-references: UNIPROT:Q16469; GB:S34439; NID:g249179; PIDN:AAB22153.1; PID:g249179
C;Superfamily: platelet glycoprotein Ib alpha chain; leucine-rich alpha-2-glycoprotein re
C;Keywords: glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Uppotherical 5.2K protein - clover yellow mosaic virus
C;Species: 14-0n1-1994 #sequence_revision 14-Jul-1994 #text_change 09-Jul-2004
C;Accession: Un0404
R;Abounaidar, M.G.; Lai, R.
J. Gen. Virol. 70, 1871-1875, 1989
A;Title: Nucleotide sequence of the 3'-terminal region of clover yellow mosaic virus RNA
A;Reference number: JU0402; MUID:89293092; PMID:2738582
A;Accession: JU0404
A;Roleoule type: genomic RNA
A;Residues: 1-43 < ABO>
A;Residues: 1-43 < ABO>
A;Coss-references: UNIPROT:P16485; GB:D00485; NID:9221218; PIDN:BAA00374.1; PID:d1000826
A;Note: this protein is encoded by sequence in front of the coat protein-encoding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168 PITITVPITMIVSTITISVPITISIPITISSVPVITIVSTFVPPMPLPRQNHEPVAISPSSP 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22; Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.4%; Score 59; DB 2; Length 42; 29.0%; Pred. No. 9.8e+02; ive 7; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.4%;
Best Local Similarity 29.0%;
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        228 QP 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : 40 EP 41
170082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

us-10-718-321-7.closed.rpr

```
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          extensin - tomato (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Reference number: I40692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                               A; Gene: NMB1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein NMB1776 [imported] - Neisseria meningitidis (strain MC58 serogroup C; Species: Neisseria meningitidis (C; Species: Neisseria meningitidis (C; Species: Janar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004 (C; Accession: DB1044 (C; Accession: DB1044 (C; Accession: DB104 (C; Accession: DB104) (C; Heidelberg, J.; Jeffries, A.C.; Nelson, K.E.; Eisen, J.A. Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B.A.; ri, H.; Qin, H.; Vamathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Pizza, M. Science 287, 1809-1815, 2000 (C; Schip, M.) (C; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Sun, Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G.; Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Velauthors: Grandi, G. Fraser, G.M.; Moxon, E.R.; Rappuoli, R.; Vela
                                                                                                                                                                                                                                                                                      hypothetical protein AF1267 - Archaeoglobus fulgidus
C;Species: Archaeoglobus fulgidus
C;Species: Archaeoglobus fulgidus
C;Species: Archaeoglobus fulgidus
C;Accession: B63408
R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dodson, Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness, E.F.
Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L.
Nature 390, 364-370, 1997
A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, S.
Smith, H.O.; Woese, C.R.; Venter, J.C.
A;Title: The complete genome sequence of the hyperthermophilic, sulfate-reducing archaect
A;Reference number: A62250; MuID:98049343; PMID:9389475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Accession: 807073 "December 1995 #text_change 09-Jul-2004
R;Gleeson, P.A.; McNamara, M.; Wettenhall, R.E.H.; Stone, B.A.; Fincher, G.B.
Biochem. J. 264, 857-862, 1989
A;Title: Characterization of the hydroxyproline-rich protein core of an arabinogalactan-A;Reference number: S07073; MUID:90147544; PMID:2695069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Keywords: hydroxyproline
;6,7,9,11,14,16,18,20,26,30,34,36,39/Modified site: hydroxyproline (Pro) #status experi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:029001; GB:AE001017; GB:AE000782; NID:92689340; PIDN:AAB8999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Status: preliminary; nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          arabinogalactan protein - Italian ryegrass (fragments)
C;Species: Lolium multiflorum (Italian ryegrass)
C;Date: 21-Nov-1993 #sequence_revision 01-Dec-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 SVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNGIVWTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.1%; Score 53.5; DB 2;
llarity 48.0%; Pred. No. 2.3e+03;
Conservative 2; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.1%; Score 55; DB 2; I ilarity 28.6%; Pred. No. 1.6e+03; Conservative 3; Mismatches 16;
207 VPPMPLPRQNHEPVATSPSSPQPAETHPTT 236
                                             209 PMPLPRQNHEPVA---TSPSSPQPA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAPVPEASTAPVAAPTTXPSPPAPA 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:07M1G3
A;Note: 19-His and 23-Leu were also found C;Keywords: hydroxonoling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: protein A; Residues: 1-46 <GLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
Les 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Molecule type: DNA
A, Residues: 1-40 < KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A, Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
Syvan der Eycken, W.; de Almeida Engler, J.; Inze, D.; van Montagu, M.; Gheysen, G. Plant J. 9, 45-54, 1996
A; Title: A molecular study of Meloidogyne incognita-induced feeding sites.
A; Reference number: Z15873; MUID:96158145; PMID:8580972
A; Reference number: Z15873; MUID:96158145; PMID:8580972
A; Retence number: T15873; MUID:96158145; PMID:8580972
A; Retence number: Z15873; MUID:96158145; PMID:8580972
A; Retence: mRNA
A; Molecule type: mRNA
A; Residues: 1-42 < VANA
A; Residues: 1-42 < VANA
A; Residues: L-42 < VANA
A; Residues: Residues: L-42 < VANA
A; Residues: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cenA protein (IgAlh) - Cellulomonas fimi (fragment)
C;Species: Cellulomonas fimi
C;Species: Cellulomonas fimi
C;Species: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 22-Oct-1999
C;Accession: I40692
R;Miller, P.B.; Shen, H.; Gilkes, N.R.; Kilburn, D.G.; Miller, R.C.; Plaut, A.G.; Warren, FEMS Microbiol. Lett. 92, 199-204, 1992
A;Title: Endoglucanase A from Cellulomonas fimi in which the hinge sequence of human IgAl
                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:09JY26; GB:AE002527; GB:AE002098; NID:g7227023; PIDN:AAF42116
A;Experimental source: serogroup B, strain MC58
C;Genetics:
A, Title: Complete genome sequence of Neisseria meningitidis serogroup B strain MCS8. A, Reference number: A81000; MUID:20175755; PMID:10710307
A, Accession: D8104
A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-34 < TET>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Lycopersicon esculentum (tomato)
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 09-Jul-2004
C;Accession: T07030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:X65780; NID:g312035; PIDN:CAA46663.1; PID:g312036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201 TTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTT 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TSVST--PPTP-----SPSTP------PTPSPLQSNVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            207 VPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTT 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.8%; Score 49; DB 2; Length 42; 28.6%; Pred. No. 4e+03; tive 3; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 2.8%; Score 49; DB 2; Length 25;
Best Local Similarity 32.7%; Pred. No. 2.4e+03;
Matches 18; Conservative 2; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125 VPPKVTTTPIVTTVPTVTTVRTSTTVPTT--TTVPTT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 2.9%; Score 50; DB 2; 18est Local Similarity 37.8%; Pred. No. 2.8e+03; Matches 14; Conservative 7; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: 140692
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-25 <RES>
```

```
A,Cross-references: UNIPROT:Q8XA85; GB:AE005174; NID:g12512676; PIDN:AAG54301.1; GSPDB:GP
A,Experimental source: strain O157:H7, substrain EDL933
C;Genetics:
A,Gene: thri.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Brucella melitensis
C;Date: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 09-Jul-2004
C;Accesion. AS3429
E;DelYecchio, V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; Ivanova, P.; Mazur, M.; Goltsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Letessc, Proc. Natl. Acad. Sci. U.S.P. 99, 443-448, 2002
A;Ttle: The genome sequence of the facultative intracellular pathogen Brucella melitenss A;Reference number: AD3252; PMID:11756688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A, Accession: AE3429
A, Status: preliminary
A, Molecule type: DNA
A, Residues: 1-47 - KUR>
A, Cross-references: UNIPROT: Q8YFV1; GB: AE008917; PIDN: AAL52600.1; PID:g17983419; GSPDB:GRA, Experimental source: strain 16M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cross-references: UNIPROT:Q8NI16; EMBL:U22410; NID:9841313; PIDN:AAA67781.1; PID:984131
                                                                                                                                                                                                          ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Homo sapiens (man)
C;Date: 06-Sep-1996 #sequence_revision 06-Sep-1996 #text_change 09-Jul-2004
C;Accession: 138970; S52862
                                                                                                                                                                                                                                                                                                                                                                                                                                                        hypothetical protein BMEI1419 [imported] - Brucella melitensis (strain 16M)
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 47;
                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Cross-references: EMBL: X84939; NID: 9695548; PID: 9695549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GDB:127526; OMIM:100800; OMIM:134934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     213 PRONHEPVATSP--SSPOPAETHP-TTLOGAIRREPT 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibroblast growth factor receptor 3 - human (fragment)
                                                                                                                                            Score 48.5; DB 2;
Pred. No. 2.8e+03;
4; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.7%; Score 47.5; DB 2;
45.9%; Pred. No. 5.6e+03;
tive 3; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-50 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Scotet, E. submitted to the EMBL Data Library, February 1995
                                                                                                                                                                                                                                                                145 RISTIVPITITVPITIVPITIMSIPITI 171
                                                                                                                                                                                                                                                                                                 2.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Map position: 4p16.3-4p16.3
C; Keywords: growth factor receptor
                                                                                                                                                 Query Match 2.8%
Best Local Similarity 44.4%
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 45.9
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Reference number: S52862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-50 <SCO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: 138970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Accession: S52862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Genetics:
A;Gene: BMEI1419
A;Map position: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S:
Matches 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; Apodaca, Mature 409, 529-533, 2001
A;Nature 409, 529-533, 2001
A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A;Reference number: A85480
A;Accession: A85480
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-27 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R.Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G. gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H. Dah Res. B. 11-22, 2001.
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and gench A;Reference number: A99629; MUID:21156231; PMID:11258796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: UNIPROT:Q8XAB5; GB:BA000007; PIDN:BAB33424.1; PID:g13359457; GSPDB:G
A;Experimental source: strain O157:H7, substrain RIMD 0509952
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       thr operon leader peptide [imported] - Bscherichia coli (strain O157:H7, substrain EDL93 C;Species: Bscherichia coli
C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 C;Accession: A85480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          thr operon leader peptide [imported] - Escherichia coli (strain 0157:H7, substrain RIMD C;Species: Escherichia coli
C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 09-Jul-2004
C;Accession: A90629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                T-cell receptor alpha chain V region (BTA27) - bovine (fragment)
C;Species: Bos primigenius taurus (cattle)
C;Dacession: H44330
R;Ishiguro, N.; Tanaka, A.; Shinagawa, M.
Immunogenetics 31, 57-60, 1990
A;Ttle: Sequence analysis of bovine T-cell receptor alpha chain.
A;Reference number: A45893; MUID:90129157; PMID:2137108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                A,Status: preliminary
A,Molecule type: mRNA
A,Molecule: 1-45 <ISHA
A,Cross-references: GB:D90026; NID:g217640; PIDN:BAA14076.1; PID:g217641
C,Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: T-cell receptor
F;14-23/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.8%; Score 48.5; DB 2; Length 27; 44.4%; Pred. No. 2.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 2.8%; Score 49; DB 2; Length 45; Best Local Similarity 31.2%; Pred. No. 4.3e+03; Matches 10; Conservative 7; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85 RRDVSLTIENTAVSDSGVYCCRVEHRGWFNDM 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145 RTSTTVPTTTVPTTTVPTTMSIPTT 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-27 <HAY>
                                                                                                                                                                                                                                                                                                                     Accession: H44530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: A90629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Gene: ECB0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
A85480
```

ઠ 셤

ઠ 셤

```
89 SLTIENTAVSDSGVYCCRVEH----RGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SVTVADTAV----YYCARGKYGEGTRRWGQGTLVTVS 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: June 3
Job time : 44.6208 secs
                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-35 < MOR>
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                            C;Accession: F81142
F3. Fattelini, H.; Saunders, N.J.; Heidelberg, J.; Jeffries, A.C.; Nelson, K.E.; Eisen, J.R Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Felischmann, R.D.; Dougherty, B.A.; ri, H.; Qin, H.; Vamathevan, J.; Gill, White, O.; Felischmann, R.D.; Dougherty, B.A.; ri, H.; Qin, H.; Vamathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Pizza, M. A;Authors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; Rappuoli, R.; Ve A;Title: Complete genome sequence of Neisseria meningitidis serogroup B strain MCS8.
A;Reference number: A81000; MUD:20175755; PMID:10710307
A;Accession: F81142
A;Accession: F81142
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypothetical protein Z3843 [imported] - Escherichia coli (strain O157:H7, substrain EDL9 C; Species: Escherichia coli C; Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 C; Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 C; Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 C; Proteina, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, B.; Potamousis, K.; Apodaca, Nature 409, 529-533, 2001 A; Proteina coli O157:H7.
A; Reference number: A88480; MUID:21074935; PMID:11206551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-50 oSTO>
A;Cross-references: UNIPROT:Q8X447; GB:AE005174; NID:g12516979; PIDN:AAG57677.1; GSPDB:G
A;Experimental source: strain O157:H7, substrain EDL933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Residues: 1-46 <TET.>
A;Cross-references: UNIPROT:Q9JZS5; GB:AE002443; GB:AE002098; NID:g7226149; PIDN:AAF4132
A;Experimental source: serogroup B, strain MC58
                                                                                                                                                                                                                                                                                                                                hypothetical protein NMB0916 [imported] - Neisseria meningitidis (strain MC58 serogroup C;Species: Neisseria meningitidis C;Species: 31-Mar_2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.6%; Score 45.5; DB 2; Length 50; 27.7%; Pred. No. 7.8e+03; artive 5; Mismatches 18; Indels
Query Match 2.7%; Score 47; DB 2; Length 50; Best Local Similarity 45.0%; Pred. No. 6.3e+03; Matches 9; Conservative 2; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    35 PCHYSGAVTSMCWNRGSCSLFTCQNGIVWTNGTHVTYRKDTRYKLLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282 LLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQ 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S20766
Ig heavy chain V region (VH4, IN109P1) - human (fragment)
C;Species: Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 2.6%; Score 46; DB 2; I
Best Local Similarity 30.0%; Pred. No. 6.7e+03;
Matches 12; Conservative 6; Mismatches 22;
                                                                                                                        87 DVSLTIENTAVSDSGVYCCR 106
                                                                                                                                                                                 10 DVRLRLANVSERDGGEYLCR 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Gene: NMB0916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: Z3843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
                                                                                                                           ò
                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
```

```
C;Accession: S20766
R;Mortari, F.; Wang, J.; Schroeder, H.W.
submitted to the EMBL Data Library, April 1992
A;Description: Analysis of human cord blood Ig heavy chain IgA and IgG repertoire.
A;Reference number: S20764
A;Accession: S20766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
20-Feb-1995 #sequence_revision 19-Apr-1996 #text_change 23-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:Z11954; NID:g33861; PIDN:CAA78011.1; PID:g33862
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 2.6%; Score 45; DB 2; Length 35; Local Similarity 35.1%; Pred. No. 5.9e+03; hes 13; Conservative 6; Mismatches 10; Indels
```

June 29, 2005, 09:47:29

homo sapien homo sapien gorilla gor pan troglod

chimpanzee porcine ade chimpanzee

chimpanzee chimpanzee chimpanzee chimpanzee chimpanzee

Perfect score:

Sequence:

OM protein

Run on:

Scoring table:

Searched:

Database

```
08j4i9
087209
087209
09pxi2
09pxe2
08egr7
06f4c0
06fip5
06gip5
08j4i6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 60.5; DB 2; Length 49;
Pred. No. 4.5e+03;
4; Mismatches 10; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AY118212; AAM78572.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AXI18211, AAM78581.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49 49 49 49 49 AA; 5101 MW; 86D35EEB15D4FC94 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4845 MW; EF30BF87DEF8C10B CRC64;
                                                                                                                                                                                                                                                                                                                                      Q8J4I5,
Q8J4I5,
Q1-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MR-2003 (TrEMBLrel. 23, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                    Envelope glycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope glycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164 TMSIPTTT-TVPTTMTVSTTTSVPTTTSIPTTTS 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47 AA
                                                                                                                                                                                                                                                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 60;
                                                            Q9PXI2
Q9PXI2
Q9EGR7
Q6F4C0
Q6LDN6
Q6QIP5
Q6QIP5
Q87175
Q87416
 Q6QIP4
Q8J4I9
Q87209
Q87172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.5%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.48;
   000000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Envelope protein.
NON TER 1
NON TER 47
SEQUENCE 47 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Envelope protein.
   0000000000000000
NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q8J4H6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ~
                                                                                                                                                                                                                                                                                                        RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT :
Q8J4H6
 Q8J4I5
                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SO SETT SERVICE SERVIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chimpanzee
chimpanzee
chimpanzee
chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lolium mult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chimpanzee
hylobates m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clover yell
chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                archaeoglob
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human respi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chimpanzee
chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 shewanella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimpanzee
                                                                                                       June 29, 2005, 09:09:20 ; Search time 201.45 Seconds (without alignments) 849.017 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                     US-10-718-321-7
1749
1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08j4h6
08j4h3
087j4h3
087j4h3
087j4h3
087j6h3
                                                                                                                                                                                                                                                                                                                         68540
               5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                       1612378 seqs, 512079187 residues
                version =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8J415
Q8J4H6
Q8J4J3
Q8J193
Q87256
Q76N72
Y5K CYMV
Q87Z73
Q87Z73
                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                             protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q87260
Q8BBA2
Q7M1G3
Q8J417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q87176
Q87194
Q87201
Q87222
Q87255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q87261
Q8E825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           087315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q87257
Q87258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09PXH8
06QIP3
                                                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q76N71
               GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length
                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40000000000000000
```

56.5 56.5 55.5 55.5 55

60 59.5 57 57

Result

Š.

.; ;

Gaps

3,

```
Name=DAF GPI-anchored type;
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 35.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 46.7"
Watches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q76N72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
                                                                                RESULT 5
                                                                                                                               087256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q76N72
                                                                                                                                                                     ACC OCT OF THE SECTION OF THE SECTIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                              ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=SIVRhE543;
MEDLINE=94202300; PubMed=8151778;
Campbell B.J., Hirsch V.M.;
Campbell B.J., Hirsch V.M.;
Extensive envelope heterogeneity of simian immunodeficiency virus in tissues from infected macaques.";
J. Virol. 68:3129-3137(1994).
GO; GO:0019031; C:viral envelope; IEA.
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                              4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
6
                                                                                                                      164 TMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSVPVTTTVSTFVPPMP 211
                                                                                                                                                                         4 TGNAATTTT --TTTTASTTT --PKETNVVNETSSCVKONNCTGLEPEP 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.4%; Score 59.5; DB 2; Length 44; 38.1%; Pred. No. 4.7e+03; tive 6; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 48;
                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitred (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AY1182041, AAM78564.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170 TITVPITMTVSTITSVPITISIPITISVPVITTVSIFVPPMP 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGNVPTT-TATTSTTTPKETNVVNETSSCVKNNNCTGLEPEP 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44 AA; 4596 MW; A236E86F5A541BC4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48 AA; 5043 MW; 387296CD4C3E6017 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
Envelope 91ycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses; Retroid viruses; Retroviridae; Lentivirus
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 57; DB 2; Le:
Pred. No. 7.4e+03;
1; Mismatches 7;
Best Local Similarity 41.7%; Pred. No. 4.6e+03; Matches 20; Conservative 4; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145 RISTIVPITITVPITIVPITIMSIPITITVP 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 46.7
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope protein.
NON TER 1
NON TER 44
SEQUENCE 44 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1996
01-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         087193
                                                                                                                                                                                                                                                                                                                                                                                                               087473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
987193
1D AC 08711
AC 08711
DT 01-N
DT 01-N
DT 01-N
DE ENCE
OS Chime
OS Chime
OS Chime
OS CAIN
(11)
RP SEQU
RR SEQU
RR SEQU
RR SEQU
RR SEQU
RR CAMP
RT LISS
R
                                                                                                                                                                                                                                                                                                                     RESULT 3
Q8443
AC Q8444
AC Q8444
DT 01-0
DT 01-0
DE ENVE
OX NCBI
RN SEQU
RA Tric
RL Subm
DR EMBL
DR EMBL
DR GG;
KW ENVE
STORY

                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

```
1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ï
                                                                                                                                                                                                                                                                                                                          STRAIN=SIVENES43;
MEDINTE=91202300; PubMed=8151778;
MEDINTE=9202300; PubMed=8151778;
Campbell B.J. Hirsch V.M.;
Extensive envelope hererogeneity of simian immunodeficiency virus in tissues from infected macaques.";
L. Virch . 68:3129-31317(1994).
EMBL; UO5152; AAA18726.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=BALB/c;
MEDLINE=98099759; PubMed=9435343; DOI=10.1007/s002510050354;
Nonaka M., Nonaka M., Takenaka O., Okada N., Okada H.;
"A new repetitive sequence uniquely present in the decay-accelerating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.2%; Score 56.5; DB 2; Length 39; 35.7%; Pred. No. 6.5e+03; tive 4; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 57; DB 2; Length 48;
Pred. No. 7.4e+03;
1; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149 TVPTTTTVPTTTVPTTMSIPTTTVPTTMTVSTTTSVPTTTS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 1
48 48
48 AA, 5073 MW, 387296CD4C3E7C67 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  39 AA; 4175 MW; 51FB51C5A0C11B9C CRC64;
Q87256 PRELIMINARY; PRT; 48 AA. Q87256; CTEMBLrel. 01, Created) 01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q76N72;
Q50N72;
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Decay accelerating factor (Fragment).
                                                                                                                                                                                  Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses, Retroid viruses, Retroviridae, Lentivirus
NCBI_TaxID=11723,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  145 RISTIVPITITVPITIVPITIMSIPTITIVP 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 RNATTTTTTTTASTTT-----TTTVTP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                        Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          factor genes.";
Immunogenetics 47:246-255(1998).
EMBL, AB003320; BAA22908.1; -.
NON_TER 1 1
NON_TER 39 39
SEQÜENCE 39 AA; 4175 MW; 51F)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.3%;
```

us-10-718-321-7.closed.rup

```
176 TMTVSTTTSVPTTTSIPTTTSVPVTTTVSTFV 207
                                                                                                                                                                                                              ARCFU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                              YC67 AR
029001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              087174
                                                                                                                                                                                  YC67_ARCFU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
Q87174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                              HDD BR KRAPA BRAPA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CSGERFFE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lib.cib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ï
                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLLINE=892393092; PubMed=2738582;
Aboulaidar M.G., Lai R.;
"Nucleotide sequence of the 3'-terminal region of clover yellow mosaic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell B.J., Hirsch V.M.;
"Extensive envelope heterogeneity of simian immunodeficiency virus in rissues from infected macaques.";
J. Virol. 68:3129-3137(1994).
EMBL; U05169; AAA18743.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                           01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
01-AUG-1990 (Rel. 15, Last annotation update)
Hypothetical 5.8 kDa protein
Hypothetical 5.8 kDa protein
Clover yellow mosaic virus (CYMV).
Viruses; ssRNA positive-strand viruses, no DNA stage; Flexiviridae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 55.5; DB 2; Length 50;
Pred. No. 9.6e+03;
4; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56; DB 1; Length 43;
Pred. No. 7.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
5040 MW; E8399F76D47706FC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 AA; 5189 MW; FD0D555B7BB3C6CB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          207 VPPMPLPRQNHEPVATSPSSPQPAETHPTT 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Gen. Virol. 70:1871-1875(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=94202300; PubMed=8151778;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; D00485; BAA00374.1; -. PIR; JU0404; JU0404. Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=SIVRhE543;
                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=12177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Envelope protein.
                                                                                                                                                                                                                                                                                                    Potexvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  virus RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                          CYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON TER
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        087273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
087273
11D 087273
10D 087273
10D 01-N
10D 101-N
                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropens Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=VC-16 / DSM 4304 / ATCC 49558;

X MEDLINE=98049343; PubMed=9389475; DOI=10.1038/37052;
A Klenk H.-P., Clayton R.J., Tomb U.-F., White O., Nelson K.E.,
A Klenk H.-P., Clayton R.J., Gwinn M.L., Hickey E.K., Peterson J.D.,
A Kichardson D.L., Kerlavage A.R., Graham D.E., Kyrpides N.C.,
Richardson D.L., Cerlavage A.R., Graham D.E., Kyrpides N.C.,
A Fleischmann R.D., Quackenbush J., Lee N.H., Sutton G.G., Gill S.R.,
A Kirkness E.F., Dougherty B.A., McKenney K., Adams M.D., Loftus B.J.,
A Peterson S.N., Reich C.I., Wnobell L.K., Badger J.H., Glodek A.,
A Uterback T.R., Cotton M.D., Spriggs T., Artiach P., Kaine B.P.,
Sykes S.M., Sadow P.W., D'Andrea K.P., Bowman C., Fujii C.,
Garland S.A., Mason T.M., Olsen G.J., Fraser C.M., Smith H.O.,
The complete genome sequence of the hyperthermophilic, sulphate-
Treducing archaeon Archaeoglobus fulgidus.";
Nature 390:364-370(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 SVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNGIVWTN 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 AVAALAMYGGTCGACAVLACN------WNVREC-----GIIWKN 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.1%; Score 55; DB 1; Length 40; 28.6%; Pred. No. 8.3e+03; tive 3; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein AF1267.
D2535A34416EC4E6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Archaeoglobus fulgidus.
Archaeoglobus fulgidus.
Archaeoglobaceae; Archaeoglobus.
NCBI_TaxID=2234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q87174;
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses, Retroid viruses, Retroviridae, Lentivirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIR; B69408; B69408.
TIGR; AF1267; -.
Complete proteome; Hypothetical protein; Signal.
                                                                                                                                                                                                                                                                                                                 40, Last sequence update)
45, Last annotation update)
4 TGTAKTSTASPTTTA----SSPSTTTVTPSV 30
                                                                                                                                                                                                               40 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Potential.
                                                                                                                                                                                                                                                                                                                         16-0CT-2001 (Rel. 40, Last sequence u
25-0CT-2004 (Rel. 45, Last annotation
Hypothetical protein AF1267 precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                   16-OCT-2001 (Rel. 40, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AE001017; AAB89992.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40 AA; 4306 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                      OrderedLocusNames=AF1267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14; Conservative
                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
```

2

us-10-718-321-7.closed.rup

```
GO; GO:0019031; C:viral envelope; IEA
Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nat. Biotechnol. 20,1118-1123(2002).
EMBL; AE015919; AANS3047.1; -.
TIGR; SOA0127; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          145 RISTIVPITITVPITIMSI 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q8BBA2;
01-MAR-2003 (TrEMBLrel. 23, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           47.8%;
Shewanellaceae; Shewanella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shewanella oneidensis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                  SEQUENCE FROM N.A
                             NCBI_TaxID=70863;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  087260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q8BBA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
Q87260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q8BBA2
ID Q8
AC Q8
DT 01
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                 "Extensive envelope heterogeneity of simian immunodeficiency virus in tissues from infected macaques.";
J. Virol. 68:3129-3137(1994).
EMBL; UN5069; AAA18664.1; -.
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-SIVRMES43;
MEDLINE-94202300; PubMed-8151778;
Campbell B.J., Hirsch V.M.;
"Extensive envelope heterogeneity of simian immunodeficiency virus in tissues from infected macaques.";
J. virol. 68:3129-3137(1994).
EMBL; U05157; AAA18731.1; --.
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plasmid megaplasmid.
Bacteria; Proteobacteria; Gammaproteobacteria; Alteromonadales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 55; DB 2; Length 47;
Pred. No. 9.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.1%; Score 55; DB 2; Length 47; 68.8%; Pred. No. 9.8e+03; tive 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D81831EEADFF7BAA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                             47 AA; 4909 MW; 1FDDEDC306E0CC2C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2003 (TrEWBLrel. 23, Created)
01-MAR-2003 (TrEWBLrel. 23, Last sequence update)
01-UDM-2003 (TrEWBLrel. 24, Last annotation update)
Hypothetical protein SOA0127.
OrderedLocusNames=SOA0127;
Shewanella oneidensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimpanzee immunodeficiency virus (SIV(cp2)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57.9%; Pred. ....
ive 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                  STRAIN-SIVRhE543;
MEDLINE-94202300; PubMed-8151778;
Campbell B.J., Hirsch V.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Envelope glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 169 TTTTVPTTMTVSTTTSVPT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTTASSSTTTVIPS 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       170 TTTVPTTMTVSTTTSV 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          47 AA; 5033 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 57.9
es 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                           Envelope protein.
NON_TER 1
NON_TER 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Envelope protein.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               47
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=env;
                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
088625
AC 088825 AC 088825 DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
DT 01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   087261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
087261
087261
08726
AC 08726
AC 08726
AC 08726
DT 01-NO
DE 08726

  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=SIVANES43;
MEDLINE=94202300; PubMed=8151778;
MEDLINE=94202300; PubMed=8151778;
Campbell B.J., Hirsch V.M.;
Extensive envelope heterogeneity of simian immunodeficiency virus in tissues from infected macaques.";
J. Virol. 68:3129-3137(1994).
EMBL; U05156; AAA18730.1;
                                                    Heidelberg J.F., Paulsen I.T., Nelson K.E., Gaidos B.J., Nelson W.C., Read T.D., Eisen J.A., Seshadri R., Ward N.L., Methe B.A., Clayton R.A., Meyer T., Tsapin A., Scott J., Beanan M.J., Brinkac L.M., Daugherty S.C., DeBoy R.T., Dodson R.J., Durkin A.S., Haft D.H., Kolonay J.F., Madupu R., Peterson J.D., Umayam L.A., White O., Wolf A.M., Vamathevan J.J., Weidman J.F., Impraim M., Uterback T.R., McDonald L.A., Feldolyum T.V., Smith H.O., Venter J.C., Nealson K.H., Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 54; DB 2; Length 47;
Pred. No. 1.1e+04;
2; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.1%; Score 54; DB 2; Length 42;
35.3%; Pred. No. 1e+04;
tive 2; Mismatches 20; Indels
STRAIN=MR-1;
MEDLINE=22297686; PubMed=12368813; DOI=10.1038/nbt749;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Complete proteome; Hypothetical protein; Plasmid. SEQUENCE 42 AA; 4324 MW; D369B745ABDF337F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           47 AA; 4971 MW; 6CFCD5D31A9B1048 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             129 VTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVP 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 VPVVPVVPVVPVVPVVPVVPVVPESLSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47 AA
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-WAR-2004 (TrEMBLrel. 26, Created)
01-WAR-2004 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Arabinogalactan protein (Fragmenta).
Lolium multiflorum (Italian ryegrass).
Eukaryota; Viridiplantee; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae;
NCBI_TaxID=4521;
                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=22213634; PubMed=12226836; DOI=10.1002/jmv.10225;
Wenter M., Collinson M., Schoub B.D.;
Molecular epidemiological analysis of community circulating
"Molecular syncytial virus in rural South Africa: Comparison of
viruses and genotypes responsible for different disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Characterization of the hydroxyproline-rich protein core of an arabinogalactan-protein secreted from suspension-cultured Lolium multiflorum (Italian ryegrass) endosperm cells."; Blochem. J. 264:857-862(1989). PIR: S07073; S07073.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 3.1%; Score 53.5; DB 2; Length 46; Local Similarity 48.0%; Pred. No. 1.2e+04; nes 12; Conservative 2; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.1%; Score 54; DB 2; Length 49; Best Local Similarity 34.1%; Pred. No. 1.2e+04; Matches 15; Conservative 4; Mismatches 25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         145 RISTIVPITITVPITIVPITMSIPTITIVPITMTVSTITSVPIT 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | |: | || || || RDPKTLAKTLKKETTTNPTKKPTPKTTERDTSTSQSTVLDTATS 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gleeson P.A., McNamara M., Wettenhall R.E.H., Stone B.A. Fincher G.B.;
                                                                                                                              Viruses; seRNA negative-strand viruses; Mononegavirales;
Paramyxoviridae; Pneumovirinae; Pneumovirus.
NCBI_TaxID=11250;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46 AA; 4173 MW; EP61188B0C8A08D0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE 49 AA; 5343 MW; DAB9CB5C890D596F CRC64;
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
1-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Glycoptocein (Fragment)
Human respiratory syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          manifestations..;
J. Med. Virol. 68:452-461 (2002).
EMBL, AF548809; AAN62466.1; -.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0019062; P:virion attachment; IEA.
InterPro; IPR000925; Glycoprot G.
Péan; PF00802; Glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          209 PMPLPRQNHEPVA---TSPSSPQPA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=90147544; PubMed=2695069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q7M1G3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
07M1G3
1D 07M1G
AC 07M1G
DT 01-MP
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

Search completed: June 29, 2005, 09:46:15 Job time: 202.45 secs

THIS PACE OF PARTY OF THE PARTY

```
5.1.6
Compugen Ltd.
 GenCore version (c) 1993 - 2005
             Copyright
```

OM protein - protein search, using sw model

June 29, 2005, 09:27:45 ; Search time 6.94695 Seconds (without alignments) 720.211 Million cell updates/sec

US-10-718-321-7 COPY 249 300 Perfect score:

275 - - - 1 1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL Sequence:

283416 seqs, 96216763 residues Searched:

Gapop 10.0 , Gapext 0.5

BLOSUM62

Scoring table:

11837 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 50

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 79:*
1: pir1:*
3: pir2:*
3: pir3:*
5: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description		Ig mu chain transm	pol protein - simi	t-complex polypept	hypothetical prote	T-cell receptor al	aminoglycoside N6'	ribulose-bisphosph	hypothetical prote	٦		pol protein - simi	hypothetical prote		myosin - pig (frag		hypothetical prote	endo-1,4-beta-xyla	pol protein - simi	Ig heavy chain V r	napin large chain	hypothetical prote		hypothetical prote			ď	hypothetical prote	entericidin B prec	hypothetical prote
SUMMARIES		849365	A49281	B49410	D82251	S00881	S30112	868880	S38918	AF0464	S29150	F49281	AC0205	A32860	146601	I46600	AG0540	A61149	D49281	PL0090	S70341	S49191	PQ0202	F82525	H95183	A36912	S72344	C30208	AC1046	Н86110
B	1	7	N	7	~	~	~	N	~	~	~	N	~	~	~	N	~	7	~	7	7	~	~	~	7	~	~	~	~	7
Length		49	46	20	30	24	35	34	41	47	48	46	39	29	33	33	37	20	46	48	30	31	40	41	40	24	38	41	48	48
& Query Match		•	•	15.3		13.8	13.8	13.5	٠	٠	٠	13.3	13.1	12.9	12.9	12.9	12.9	12.7	12.5	12.5	12.4	12.4	12.4	12.4	12.2	•	12.0	12.0	12.0	12.0
Score		•	42.5			38	38	37	37	37	37	36.5	36	35.5	35.5	ů.	ď.	35	4.	34.5		34	34	'n	33.5		33			33
Result No.	1 1 1 1		7	Ю	4	2	9	7	80	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56			29

	32.5	11.8	31	N	H82682	hypothetical prote
-	32.5	11.8	36	~	B42418	auracyanin A - Chl
Ŋ	32.5	11.8	46	~	E49281	pol protein - simi
33	32	11.6	56	N	B53113	Lys-gingipain form
4	32	11.6	28	0	G32351	34K class B flagel
35	32	11.6	59	N	I50214	protein-tyrosine-p
91	32	11.6	31	N	A57001	endo-1,4-beta-xyla
7	32	11.6	41	~	S56120	collagenase type I
38	32	11.6	42	~	137543	MHC HLA-DR-beta-1
9	32	11.6	45	~	D45731	gene 39.2 protein
40	32	11.6	48	~	AC1889	hypothetical prote
41	31.5	11.5	46	N	T43389	hypothetical prote
42		11.3	16	~	F49039	T-cell receptor be
43		11.3	19	N	149422	L-lactate dehydrog
44	31	11.3	23	~	S47188	T-cell receptor J-
45	31	11.3	56	7	F45087	cysteine proteinas

```
Ty with communications of the calva (bowfin)
C; Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 20-Mar-1998
C; Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 20-Mar-1998
C; Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 20-Mar-1998
C; Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change in R.W. i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 43.5; DB 2; 1
Pred. No. 1.4e+02;
5; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 VFQYYVDQNG-IEYNGDSLWNTVCTFIFL 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 LYSYTTDGNDTVTESSDGLWNNNQTQLFL 30
Ig mu chain transmembrane region - bowfin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 34.5%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

RESULT 2

A49281

pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (isolate Bab34) (fragment)
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
C;Decies: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C;Accession: A49281
R;Saskena, N.K.; Herve, V.; Durand, J.P.; Leguenno, B.; Diop, O.M.; Digoutte, J.P.; Mathi R;Salkena, N.K.; Herve, V.; Barre-Sinoussi, F.; Poiesz, B.J.
Virology 198, 297-310, 1994
A;Tile: Seroepidemiologic, molecular, and phylogenetic analyses of simian T-cell leukemi A;Reference number: A49281; MUID:94082462; PMID:8259665
A;Accession: A49281
A;Accession: A49281
A;Accession: A49281
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-46 <SAK>
A;Cross-references: UNIPROT:Q88390; GB:L20351; NID:g431699; PIDN:AAA16596.1; PID:g431690
C;Superfamily: pol polyprotein

15.5%; Score 42.5; DB 2; Length 46; llarity 39.4%; Pred. No. 1.8e+02; Conservative 3; Mismatches 14; Indels Local Similarity nes 13; Conserv Query Match Best Local Si Matches 13;

~

Gaps

3,

ò 셤

```
A;Molecule type: DNA
A;Residues: 1-35 <MAB>
A;Cross-references: EMBL:X64525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 58.3
Local 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 47.1
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24 YSIVTNSNDSVT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 YSYTTDGNDTVT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein A; Residues: 1-34 <YOS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A, Genome: chloroplast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Accession: S68880
                                                                                                                                                                                              Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gene: aacA4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C.Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                 N;Alternate names: chaperonin homolog (peak 6a)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 2-Sep-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: B49410
R;Rommelaere, H:; Van Troys, M.; Gao, Y.; Melki, R.; Cowan, N.J.; Vandekerckhove, J.; An Proc. Natl. Acad. Sci. U.S.A. 90, 11975-11979, 1993
A;Title: Eukaryotic cytosolic chaperonin contains t-complex polypeptide 1 and seven rela A;Reference number: A9410; MUID:94089752; PMID:7903455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein VC1030 [imported] - Vibrio cholerae (strain N16961 serogroup O1) C; Species: Vibrio cholerae (cjate: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004 C; Joacesion: D82251 B2251 B251 B251 B251 B251 B2521 B25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T-cell receptor alpha chain precursor - human (fragment)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 23-Jul-1999
C;Accession: S00881 #sequence_revision 30-Sep-1989 #text_change 23-Jul-1999
R;Berkhout, B.; Hall, C.; Terhorst, C.
Nucleic Acids Res. 16, 5209, 1988
Nucleic Acids Res. 16, 5209, 1988
A;Title: Complete cDNA sequence coding for the human T cell receptor alpha chain of HPB-A;Reference number: S00881; MUID:88262524; PMID:2898755
A;Accession: S00881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A.Cross-references: UNIPROT:Q9KT75; GB:AE004184; GB:AE003852; NID:g9655483; PIDN:AAF9418
A.Experimental source: serogroup Ol; strain N16961; biotype El Tor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
-complex polypeptide 1 homolog (peak 6a fraction) - rabbit (fragments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 42; DB 2; Length 50;
Pred. No. 2.2e+02;
7; Mismatches 19; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 39; DB 2; Length 30;
Pred. No. 2.9e+02;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A Experimental source: reticulocyte
A,Note: sequence modified after extraction from NCBI backbone
A,Note: sequence extracted from NCBI backbone (NCBIP:141037)
C,Superfamily: molecular chaperone t-complex-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | | | | :: | | | : : : : : : | | | : DGKGDVTITNDGATILKQMQVLHPAARMLVELSKGIH 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 DGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIY 44
                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-50 <ROM>
A;Cross-references: UNIPROT: Q9TRD7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 29.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28 LFLEHSLLTANTT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 LFYEHELLRLNVT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-30 <HEI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S00881
A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Accession: D82251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Map position: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
ribulose-bisphosphate carboxylase (EC 4.1.1.39) large chain - kidney bean chloroplast (fricibulose-bisphosphate Phaseolus vulgaris (kidney bean)
C;Species: chloroplast Phaseolus vulgaris (kidney bean)
C;Species: chloroplast Phaseolus vulgaris (kidney bean)
C;Species: charce: change 09-Jul-2004
C;Accession: S68880
R;Yoshida, T.; Minamikawa, T.
Bur. J. Bhochen. 238, 317-324, 1996
A;Fitle: Successive amino-terminal proteolysis of the large subunit of ribulose 1,5-bisph A;Reference number: S68880; MUID:96283823; PMID:8681940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Accession: $30112
R;Mabilat, C.; Lourencao-Vital, J.; Goussard, S.; Courvalin, P.
Mol. Gen. Genet. 235, 113-1121, 1992
A;Title: A new example of physical linkage between Tn1 and Tn21: the antibiotic multiple-A;Reference number: $30112; MUID:93062798; PMID:1331747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Description: catalyzes the reaction of carbon dioxide with D-ribulose 1,5-bisphosphate C;Superfamily: ribulose-bisphosphate carboxylase large chain C;Keywords: Calvin cycle; carbon dioxide fixation; carbon-carbon lyase; carboxy-lyase; cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aminoglycoside N6'-acetyltransferase (EC 2.3.1.82) - Klebsiella pneumoniae plasmid pCFF0'
                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 05-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                        Gaps
A,Residues: 1-24 <BER>
A,Cross-references: EMBL:X07135; NID:g36938; PIDN:CAA30147.1; PID:g36939
A,Cross-references: EMBL:X07135; NID:g36938; pibm:catching to it is uncertain whether Met-1 or Met-3 is the initiator
C,Superfamily: immunoglobulin V region; immunoglobulin homology
C,Reywords: T-cell receptor
F;1-23/Domain: (or 3-23) signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Genome: plasmid
C;Keywords: acyltransferase; antibiotic resistance; coenzyme A
                                                                                                                                                                                                                                Score 38; DB 2; Length 24;
Pred. No. 2.9e+02;
7; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.5%; Score 37; DB 2; I
47.1%; Pred. No. 5.8e+02;
tive 0; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 38; DB 2;
Pred. No. 4.5e+02;
2; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                            2 NMLTASLLRAVIASICV 18
                                                                                                                                                                                                                                                                                                                                                                          33 SLLTANTTKGIYAGVCI 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Cross-references: UNIPROT: Q7M2E2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 YTTDGNDTVTESSDGLW 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 YTPDYETKDAESSTGTW 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.8%;
58.3%;
                                                                                                                                                                                                                                   13.8%;
Similarity 29.4%;
5, Conservative
```

```
A,Accession: E61531
A,Molecule type: protein
A,Molecule type: protein
C,Function:
A,Residues: 1-48 «KA2>
C,Function:
A,Description: catalyzes the dismutation of 2 molecules of peroxide radical to dioxygen & C,Superfamily: supervice dismutase [Cu-Zn]
C,Superfamily: supervice dismutase [Cu-Zn]
C,Keywords: copper; cytosol; metalloprotein; oxidoreductase; zinc
F,44,46/Binding site: copper (His) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Species: simian T-cell lymphotropic virus type 1, STLV-1
C; Date: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C; Date: 19-Mar-1997 #sequence_revision 19-Dec-1997 #text_change 09-Jul-2004
C; Accession: R49281; B49281
Faul, B.; Dube, D.K.; Barre-Sinoussi, P.; Deiesz, B.J.
Virology 198, 297-310, 1994
A; Title: Serceptidemiologic, molecular, and phylogenetic analyses of simian T-cell leukemi A; Reference number: A49281; MUID:94082462; PMID:8259665
A; Accession: R49281
A; Status: preliminary; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-46 <SAKs
A;Cross-references: UNIPROT:Q88344; UNIPROT:Q88360; UNIPROT:Q88343; UNIPROT:Q88394; UNIPF
PROT:Q88331; UNIPROT:Q88406; GB:L20357; NID:g431721; PIDN:AAA16561.1; PID:g431722
A;Experimental source: isolate SAB37Pol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Accession AC0205
B;Arskhill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.; deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; Il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, F. Nature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:Q8ZFL7; GB:AL590842; PIDN:CAC90503.1; PID:g15979714; GSPDB:G?
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 1-46 <SA2>
A;Cross-references: GB:L20358; NID:g431709; PIDN:AAA16556.1; PID:g431710
A;Experimental source: isolate SAB91037
C;Superfamily: pol polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pol protein - simian T-cell lymphotropic virus type 1, STLV-1 (fragment)
C;Species: simian T-cell lymphotropic virus type 1, STLV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein YPO1682 [imported] - Yersinia pestis (strain CO92)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'n
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 13.5%; Score 37; DB 2; Length 48; Best Local Similarity 50.0%; Pred. No. 8.5e+02; Matches 9; Conservative 1; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 36.5; DB 2;
Pred. No. 9.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LYSYTTDGNDTVTES -- SDGLWNNNQTQLFLEH 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 LYKYPIDKPDLPMDNALSIALWINHLNV-LTH 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Accession: B49281
A,Status: preliminary; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 YSYTTDGNDTVTESSDGL 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 FSQEGDGPTTVTXSVSGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 36.4
Matches 12; Conservative
A; Reference number: A61531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-39 < KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: AC0205
A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: YPO1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Kanematsu, S.; Asada, K.
Free Radic. Res. Commun. 12, 383-390, 1991
A,Title: Chloroplast and cytosol isozymes of CuZn-superoxide dismutase: their characteri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:Q38027; EMBL:X76288; NID:g432610; PIDN:CAA53917.1; PID:g5790
C;Genetics:
A;Start codon: GTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            superoxide dismutase (EC 1.15.1.1) (Cu-Zn) III, cytosolic - rice (fragment)
C;Species: Oryza sativa (rice)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: 829150; E61531
R;Kanematsu, S.; Asada, K.
Bant, Cll Physiol. 31, 99-112, 1990
A;Title: Characteristic amino acid sequences of chloroplast and cytosol isozymes of Cuzr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:Q8ZAI7; GB:AL590842; PIDN:CAC93282.1; PID:g15981729; GSPDB:Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Accession: AF0464
Fyazkhili, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B. deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, Mature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                             hypothetical protein 6 - phage phi-C31
C;Species: phage phi-C31
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein YPO3815 [imported] - Yersinia pestis (strain CO92)
C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; DB 2; Leus-...
; 8.38+02;
7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 37; DB 2; Length 41;
Pred. No. 7.1e+02;
3; Mismatches 3; Indels
                                                                                                                                                                                                                                                          C;Accession: S38918
S;Hartley, N.M.; Murphy, G.O.; Bruton, C.J.; Chater, K.P. submitted to the EMB1 Data Library, November 1993
A;Reference number: S38912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 37; DB 2; Pred. No. 8.3e+5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 SDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SECTION SECUNDATION SECTION SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Cross-references: UNIPROT: Q7M237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.5%;
45.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 39.1%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 13.5
Best Local Similarity 45.5
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42 GIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12 GVMVĞICVGVL 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein A; Residues: 1-48 < KAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,Status: preliminary
A,Molecule type: DNA
A,Residues: 1-41 <HAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-47 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S38918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: S29150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: AF0464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Gene: YPO3815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
g
                                                                                                                                                                                                                                                    RESULT 13

biotin-binding protein I - chicken (fragment)

biotin-binding protein I - chicken)

C;Species: Gallus gallus (chicken)

C;Species: Gallus gallus (chicken)

C;Date: 22-Nov-1989 #sequence_revision 22-Nov-1989 #text_change 24-Jun-1993

C;Accession: A32860

R; Bush, L.; White III, H.B.

J; Biol. Chem. 264, 5741-5745, 1989

A;Title: Conversion of domains into subunits in the processing of egg yolk biotin-bindin A;Reference number: A32860, MUID:89174628; PMID:2925632

A;Accession: A32860

A;Accession: preliminary

A;Molecule type: protein

A;Residues: 1-29 eBUS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Bement, W.M.; Hasson, T.; Wirth, J.A.; Cheney, R.E.; Mooseker, M.S. Proc. Natl. Acad. Sci. U.S.A. 91, 6549-6553, 1994
A;Title: Identification and overlapping expression of multiple unconventional myosin gen A;Reference number: A55758; MUID:94294418; PMID:8022818
A;Accession: I46601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Accession: I46600
R;Bement, W.M.; Hasson, T.; Wirth, J.A.; Cheney, R.E.; Mooseker, M.S.
Proc. Natl. Acad. Sci. U.S.A. 91, 6549-6553, 1999
Proc. Natl. Acad. Sci. U.S.A. 91, 6549-6553, 1999
A;Title: Identification and overlapping expression of multiple unconventional myosin gen
A;Reference number: A55758; MUID:94294418; PMID:8022818
A;Accession: I46600
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:Q29067; GB:L29136; NID:g457346; PIDN:AAA20921.1; PID:g531152
C;Superfamily: myosin heavy chain 95F; myosin motor domain homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ij
                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                myosin - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             myosin - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                          Gaps
                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12.9%; Score 35.5; DB 2; Length 29; 52.9%; Pred. No. 7.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12.9%; Score 35.5; DB 2; Length 33; ilarity 42.9%; Pred. No. 8.4e+02; Conservative 5; Mismatches 10; Indels
  Length 39;
                                                        13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
  13.1%; Score 36; DB 2; 32.0%; Pred. No. 8.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-33 <BEM>
                                                          4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |: || | || || : || :|| OSTNFLIH-CLTALSQKGYASGVERTIL 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25 OTOLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                  23 NNOTOLFLEHSLLTANTTKGIYAGV 47
                                                                                                                                                                        11 DNRKLLLADGIKSTVNTNKSVYIAV 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 GLWNNNQTQLFLEHSLL 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 GLWENEQDSL-MEISAL 24
Query Match
Best Local Similarity 32.0°
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
hes 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
A; Residues: 1-33 < BEM>
A; Residues: 1-33 < BEM>
A; Cross-references: UNTPROT: 029066; GB: L29135; NID: 9457345; PIDN: AA20920.1; PID: 9531151
C; Superfamily: myosin heavy chain 95F; myosin motor domain homology
Cuery Match
Best Local Similarity 47.8%; Pred. No. 8.40+02;
Matches 11; Conservative 3; Mismatches 8; Indels 1; Gaps 1;

Oy 25 QTQLFLEHSLLTANTTKGIYAGV 47

Db 1 QSTNFLIHH-LTALSQKGFASGV 22

Search completed: June 29, 2005, 09:47:30
Job time: 7.94695 secs
```

```
$ £
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q861u3 cryptospori
Q81or cryptospori
Q81or cryptospori
Q81bb4 cryptospori
Q861u1 cryptospori
Q861u1 cryptospori
Q861u1 cryptospori
Q861u2 cryptospori
Q81415 chimpanzee
Q93143 chimpanzee
Q93144 mus musculu
Q7rdl1 plasmodium
Q7rdl1 plasmodium
Q861u2 cryptospori
Q861u3 cryptospori
Q861u4 cryptospori
Q861u4 cryptospori
Q861u4 cryptospori
Q7861u4 cryptospori
Q7861u4 cryptospori
Q861u4 cryptospori
Q86233 human relaw
Q81x1 chinlo iride
Q75xx4 dictyosteli
Q86230 human trawu
Q82209 human trawu
Q82209 human t-1ym
Q82209 human t-1ym
Q82209 human immun
Q7473 plasmodium
Q658h0 mannheimia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cryptospori
cryptospori
simian t-ly
cryptospori
homo sapien
                                                                                                                                     June 29, 2005, 09:09:20 ; Search time 31.3635 Seconds (without alignments) 849.017 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                      275 - - - 1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chôsen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                       1612378 segs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                               US-10-718-321-7_COPY_249_300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                 - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             086LU3
0810R6
0810R7
08110R7
0
                                                                                                                                                                                                                                                                                                                                              BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q7RD73
Q65SH0
Q7SEZ1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0 Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing:
                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41.5
                                                                                               OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
No.
```

Q78501 human immun Q76n41 giycine max Q9r5w5 neisseria g Q86237 human rocav Q86239 human rocav Q86611 human immun Q80611 human immun Q71v48 homo sapien Q8uykC wheat dwarf Q8uykC wheat dwarf Q8uykZ wheat dwarf Q8uykA wheat dwarf	update) on update) on update) ia; Eimeriida; ia; Eimeriida; in Eimeriida; in Eimeriida; in Eimeriida; in Eimeriida; in Eimeriida;	3323D35 CRC64; DB 2; Length 43; 2.5e+02; ches 10; Indels 4; Gaps 2; HSLLTA 37 HILLTA 37 ce update) ation update) cidia; Eimeriida; cryptosporidium isolates from
14.0 31.2 Q78501 14.0 39.2 Q76841 13.8 29.2 Q86237 13.8 29.2 Q86237 13.8 29.2 Q86231 13.8 29.2 Q8621 13.8 35.2 Q86611 13.8 36.2 Q71V48 13.8 46.2 Q81YXC 13.8 46.2 Q81YXC 13.8 46.2 Q81YXC 13.8 46.2 Q81YXC 13.8 46.2 Q81YXC 13.8 46.2 Q81YXC	ALIGNMENTS MINARY; PRT; 43 P BLrel. 24, Created) BLrel. 24, Last sequence BLrel. 24, Last sequence ein (Fragment). ata; Apicomplexa; Coccidi ata; Apicomplexa; Coccidi ; Cryptosporidium. PubMed=12624019; re C.I., Green J., McLauc iological analysis of Cry s by using a heteroduples ased on a small double-st 1. 41:981-992(2003). AO19461.1; ein. 475.	3 AA; 4750 MW; 1D0A81C401 larity 33.3%; Pred. No. Conservative 10; Mismatc DGNDTVTESSDGLWNNNQTQLFLI :::
3332 344444 3754440 3986 3986 3986 3986 3986 3986 3986 3986	RESULT 1 0865LU3 DG 0861LU3 DG 0861LU3 DT 01-JUN-2003 (TrEM DT 01-JUN-2003 (TrEM DE HYPOCHETICAL DFOL OS CYTYDCOSPOTIGHUM POS REMORE FROM N.A REMORE FROM MITCODIO DR FROM HYPOCHETICAL POT FT NON TER 1 REMORE FROM POS FT NON TER 1 FT NON TER 1 REMORE FROM TER 1 FT NON T	EQUENCE EQUENCE EQUENCE 12 Local S nes 12 18 18 18 18 18 18 18 18 18 18 18 18 18
	RESULUA 100 6 LUA 100 6 LUA 100 0 DE HO 100 0 DE HO	SO OU BEST TO SO OU SO O

.. 7

Gaps

셤

8

```
SEQUENCE FROM N.A.

MEDLINE=22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:981-992(2003).
EMBL; AY135737; AAN62578.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Saccharomyces cerevisiae (Baker's yeast).
Eukaryota, Fungi, Ascomycota, Saccharomycotina, Saccharomycetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=S288C;
Brachat S., Dietrich F.S., Voegeli S., Zhang Z., Stuart L.T.,
Lerch A., Gaffiney T., Philippsen P.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 45.5; DB 2; Length 48;
Pred. No. 4.3e+02;
9; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16.7%; Score 46; DB 2; Length 43; 33.3%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 VTESSDGLW------NNNOTQLFLE-----HSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhang Z., Stuart L.T., Dietrich F.S.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY268135; AAR26281.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q86LU1;
01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Hypothetical protein (Fragment).
Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
                        Bukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Saccharomycetales; Saccharomycetaceae; Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48 AA; 5443 MW; EE70B5821E357BFA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                   43 AA; 4766 MW; 1D0A81C41F7BDB35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ą.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16.5%;
25.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Defective Sdc25p (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 33.33 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 25.5
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2004 (TrEMBLrel. 05-JUL-2004 (TrEMBLrel.
     parvum
                                                                                                                                                                                                                                                                                                                                          Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=4932;
  Cryptosporidium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=S288C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                     NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q6WV04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q6WV04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10198Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101980
  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CSEPTERSO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-T89, and 1962;
MEDLINE-22511025; PubMed=12624019;
MEDLINE-22511025; PubMed=12624019;
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Miccobiol. 41:981-92(2003).
EMBL; AX135730; AAN62571.1;
EMBL; AX135733; AAN62574.1;
EMBL; AX15654; AAO19457.1;
EMBL; AX176654; AAO19459.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.
  assay and
                  Accidence and controlled to the controlled the controlled to the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 33.3%; Fred. NO. ......,
hes 12; Conservative 10; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukāryota; Alveolata; Apicomplexa; Coccidia; Bimeriida;
Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                           43 AA; 4736 MW; 1D0A81C40B2A9E35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43 AA; 4766 MW; 1D0A81C40B2A8E34 CRC64;
using a heteroduplex mobility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2003 (TrEMBLrel. 23, Created)
1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23, Created)
U-MAR-2003 (TrEMBLrel. 23, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : || : :::|| : || || FVIDLSSDLSNTADGLGOAW-YKISQVTVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : | | : :::|| | : :|::|| | 37
3 FVTDLSSDLSNTADGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 YITDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.7%; Score 46; DB 2; 1
33.3%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16.7%; Score 46; DB 2; 33.3%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 33.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cryptosporidium parvum.
                                                                                                                                                                                                                                                                                                                    Aypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=5807;
                                                                                                                                                                                                                                                                                                                                               NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON TER
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QBISB4
QBISB4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OBIOR7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q810R7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
```

Q81SB4 1D Q8 AC Q8 DT 01 DT 01 DE HY

ò ద

5

Gaps

17;

42

ö

Gaps

ö

셤

```
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=FVB/N; IISSUE=Mammary tumor. C3;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                           Score 44; DB 2; Length 46;
Pred. No. 6.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / Match 16.0%; Score 44; DB 2; Length 49; Local Similarity 48.0%; Pred. No. 6.7e+02; Pred. 12; Conservative 2; Mismatches 11; Indels
                                                SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitred (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AY118209 AAAN'8569.1; -
GO, GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
Trichel A.M., Rajakumar P.A., Murphey-Corb M.A.;
Submitred (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AY118212, AAM78572.1;
GO; GO:0019031; C:viral envelope; IEA.
                                                                                                                                                                                                                                                                                             46 46 46
46 AA; 4928 MW; 9A2C139D4777658E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49 49 49 49 49 AA; 86D35EBB15D4FC94 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Envelope glycoprotein (Fragment).
Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses, Retroid viruses, Retroviridae, Lentivirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2001 (TrEMBLrel. 17, Last sequence update) 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 SYTTDGNDTVTESSDGLWNNNQTQL 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 STITPKADVVNETSSCVKNNNCTGL 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 SYTTDGNDTVTESSDGLWNNNQTQL 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 STTTPKADVVNETSSCVKNNNCTGL 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2001 (TrEMBLrel. 17, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Envelope glycoprotein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                           16.0%;
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 48.0
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hypothetical protein.
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                              Envelope protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Envelope protein.
                                                                                                                                                                                                                                                   NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  099JT4
099JT4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8J4I5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q99JT4
                        STTYSHTTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                Leoni F., Gallimore C.I., Green J., McLauchlin J.; "Molecular epidemiological analysis of Cryptosoporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.", J. Clin. Microbiol. 41:981-992(2003).

EMBL, AXI76661; AA019466.1; --.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leoni F., Gallimore C.I., Green J., McLauchlin J.,
"Molecular epidemiological analysis of Cryptosporidium isolates from
humans and animals by using a heteroduplex mobility assay and nucleic
acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41.981-992 (2003).

EMBL, AN176647; AA019452.1;
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 44; DB 2; Length 43;
Pred. No. 5.8e+02;
9; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16.0%; Score 44; DB 2; Length 43; 29.7%; Pred. No. 5.8e+02; tive 11; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cryptosporidium meleagridīs.
Eukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 AA; 4770 MW; 130461240B2A9E35 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 AA; 4812 MW; FD31E1C40B323830 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Envelope glycoprotein (Fragment).

Chimpanzee immunodeficiency virus (SIV(cpz)) (CIV).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 YTTDGNDTVTESSDGL----WNNNOTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : || : ::||| : :||| 37 SETION STREET 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 YTTDGNDTVTESSDGL---WNNNOTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : || : || : || : || || 37 SVTDLSSDFSNTADGLGQAW-YKISQVAVEHIILTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46 AA
Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
                                                                                                                                                                                 MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 16.0%;
il Similarity 33.3%;
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 29.74
nes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=93969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=1689;
                                                                                                                                                     STRAIN=1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2002
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8J4I8
Q8J4I8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q86LU6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    овегле
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
086LU6
AC 086LU
AC 086LU
AC 086LU
DT 01-JU
DT 01-JU
DT 01-JU
DT 01-JU
DE CLYP
OC CLYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
08.418
1D 08.44
AC 08.44
DT 01-00
DT 01-00
DT 01-00
DE ENVE.
OS Chim
```

ઠે g

ö

Gaps

ö

```
Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Mcrobiol. 41:981-992(2003).
EMBL, AY176649; AAO19454.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Mcrobiol. 41:981-992(2003).
EMBL; AY176659; AAO19464.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.6%; Score 43; DB 2; Length 43; 30.6%; Pred. No. 7.7e+02; tive 11; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein (Fragment).
Cryptosporidium felis.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43 AA; 4754 MW; 249A01240B2A9E26 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 AA; 4812 MW; 1C4F81C40B2A9B21 CRC64;
                                                                                                                                                                                                                                                                       01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : || : :||| | :||| 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 43; DB 2; i Pred. No. 7.7e+02;
                                                                                                                                                                                                                        43 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TrEMBLrel. 24, Created)
                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=22511025; PubMed=12624019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=22511025; PubMed=12624019;
                       44
                                                     9 NALKLFFDLSLLNKNNIKSMY 29
                                                                                                                                                                                                                                                                                                                                                       Hypothetical protein (Fragment).
Cryptosporidium parvum.
                    24 NOTOLFLEHSLLTANTTKGIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mac
Local Sir.
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2003
01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=1059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                     Q86LU2;
Q86LU2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q86LU5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
                                                                                                                                                                                             Q86LU2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0861U5
                                                                    셤
                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCOUNT REPORT OF THE REPORT O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McZhwan P.J., McKernan K.J., Malek J.A., Gunaranne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Vallalon D.K., Muzny D.M., Sodergren E.J., Lu K., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.T., Skalska U., Smallus D.E., Schnerch A., Schein J.E., "Generation and initial analysis of more than 15,000 full-length human and mouse CDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Genome sequence and comparative analysis of the model rodent malaria parasite Plasmodium yoelii yoelii.";
Nature 419:12-519 (2002).
-1- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carlton J.M., Angluoli S.V., Suh B.B., Kooij T.W., Pertea M., Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L., Peterson J.D., Pop M., Kosack D.S., Shumway M.F., Bidwell S.L., Shallom S.J., van Aken S.E., Riedmuller S.B., Feldblyum T.V., Cho J.K., Quackenbush J., Sedegah M., Shoaibi A., Cummings L.M., Florens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A., Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B., van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R., Carucci D.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Plasmodium yoelii yoelii.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.8%; Score 43.5; DB 2; Length 41; 31.6%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 43; DB 2; Length 41; Pred. No. 7.3e+02; 3; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Strausberg R.;
Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC005705; AAH05705.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E19A7D61ABFB24F0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7692D458655D3B05 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                           Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TrEMBLrel. 26, Created)
(TrEMBLrel. 26, Last sequence update)
(TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=12368865; DOI=10.1038/nature01099;
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN=FVB/N; TISSUE=Mammary tumor. C3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preliminary data.
EMBL; AABL01001711; EAA17433.1; -.
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 AA; 4786 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 AA; 4720 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=73239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=PY05411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2004
01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   O7RDL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
Q7RDL1
```

g

ઠ

5;

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-94082462; MEDLINE-94082462; MEDLINE-94082462; MEDLINE-94082462; MEDLINE-94082462; MEDLINE-94082462; Methol V. Durand J.P., LeGuenno B., Diop O.M., Saksena N.K., Herre V., Durand J.P., Love J.L., Benz P.M., Digoutte J.P., Mathiot C., Miller M.C., Love J.L., Benz P.M., Erensoy S., Barre-Sinoussi F., Poiesz B J.; Erensoy S., Barre-Sinoussi F., Poiesz B J.; Cell leukemia viruses (STLV-I) from various naturally infected monkey in species from central and western Africa."; Virology 198:297-310(1994).

The Meth. L20351; AA416596.1; -.. REMBL: L20351; AA416596.1; -.. REMBL: L20351; AA4281.

The Non-TER H G 46

SEQÜENCE 46 AA; 5357 MW; 741682B6E7330E51 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Leoni F., Gallimore C.I., Green J., McLauchlin J.;
"Molecular epidemiological analysis of Cryptosporidium isolates from humans and animals by using a heteroduplex mobility assay and nucleic acid sequencing based on a small double-stranded RNA element.";
J. Clin. Microbiol. 41:891-992 (2003).
EMBL; AY176651; AA019456.1; -.
NON TER 1 1
NON TER 43 43
SEQUENCE 43 AA; 4798 MW; CBIFRICADDITATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>ښ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 15.3%; Score 42; DB 2; Length 43; Best Local Similarity 30.6%; Pred. No. 1e+03; Matches 11; Conservative 10; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                 Simian T-lymphotropic virus 1.
Viruses; Retroid viruses; Retroviridae; Deltaretrovirus.
NCBI_TaxID=33747;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Alveolata, Apicomplexa, Coccidia, Eimeriida,
Cryptosporidiidae, Cryptosporidium.
NCBI_TaxID=83540;
                                                                                                                                                                                                                  (TrEMBLrel. 01, Created)
(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Hypothetical protein (Fragment).
Cryptosporidium felis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 15.5%; Score 42.5; DB 2; Similarity 39.4%; Pred. No. 9.5e+02; 13; Conservative 3; Mismatches 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 LYSYTTDGNDTVTES -- SDGLWNNNQTQLFLEH 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13 LYKYFTÖKPÖLPMDNALSIGLWTFNHLNV-LTH 44
                                                                                                                                                              46 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 AA
                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=1626;
MEDLINE=22511025; Pubmed=12624019;
                                                                                                                                                                                                                  01-NOV-1996 (TrEMBLrel. 01,
                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                            01-NOV-1996 (TrEMBLrel.
01-JUN-2003 (TrEMBLrel.
Pol protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                              Name=pol
                                                                                                                                                                                        068880
                                                                                                                                                        088390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q86LU4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
086104
AC 086104
DT 01-JU
DT 
                                                                                          RESULT 14
Q88390
셤
                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

5 YTTDGNDTVTESSDGL---WNNNQTQLFLEHSLLTA 37

ઠે

```
: || : :::|| : || : || 37
                                                                                             Search completed: June 29, 2005, 09:46:16 Job time : 32.3635 secs
: || : :::||| :||| 37 PVTDLSSDLSNTADGLGQAW-YKISQVEVEHIIMTA 37
```

THIS PREE BLANK USPION

ALIGNMENTS

2105692

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

2105692 seqs, 386760381 residues

Title: Perfect score:

Run on:

Sequence:

Scoring table:

Searched:

AAW38336 standard; protein; 334 AA. (first entry) 21-MAY-1998 AAW38336; AAW38336

Human kidney injury related molecule (KIM).

Kidney injury related molecule; KIM; human; renal disease; injury; nephritis; tissue regeneration; therapy; monoclonal antibody. Kidney

Homo sapiens. WO9744460-A1

27-NOV-1997.

97WO-US009303. 23-MAY-1997;

96US-0018228P. 96US-0023442P. 24-MAY-1996; 23-AUG-1996;

(BIOJ) BIOGEN INC.

Ä Wei Sanicola-Nadel M, Bonventre JV, Hession CA, Ichimura T, Cate RL;

WPI; 1998-018514/02.

DNA encoding kidney injury related molecule - which is upregulated in injured or rejenerating tissue, useful to promote growth of new tissue and survival of damaged tissue.

Claim 9; Page 46-47; 68pp; English.

This protein, designated kidney injury related molecule (KIM), is upregulated in injured or regenerating tissue. Its amino acid sequence was deduced from a clone (see AAT96035) obtained from a human embryonic liver library. A 572-amino acid (see AAW38335) and a 307-amino acid rat KIM (see AAW38334) are also claimed. Recombinant KIM polypeptides can be expressed in prokaryotic and eukaryotic host cells using a claimed process. Soluble variants fused to a toxin, imageable compound or radionuclide, and IgG fusion proteins are also claimed. KIM, or an agonist, can used to treat renal disease and to promote the growth of new tissue or the survival of damaged tissue, generally in conditions where the binding of specific ligand to KIM stimulates cell growth, maintains

Ø	A Geneseq 16Dec04:*
' ::	geneseqp1980s:*
7	geneseqp1990s:*
 	geneseqp2000s:*
4	geneseqp2001s:*
 2	geneseqp2002s:*
; 9	geneseqp2003as:*
7:	genesegp2003bs:*
 8	geneseqp2004s:*
18	is the number of results predicted by chance to have a

	Ti	
lave a	score greater than or equal to the score of the result being printed	
유	beir	ion
Pred. No. is the number of results predicted by chance to have a	result	and is derived by analysis of the total score distribution
ል	the	e dj
cted	οĘ	scor
predi	score	cotal
ılts	the	the t
reg	2	늉
r of	agual	/sis
mbe:	or	nal
n ar	han:	ζ
8 t	ert	ved
No. i	great	deri
Pred.	Bcore	and is

Description	Aaw38336 Human kid Aao26679 KTM-1 rel	Human	Plasmi	Ade36592 Human NOV Abr58582 Human can	Amino	Amino	Abr48174 Human bla	Aao26680 KIM-1 rel	Ade36594 Human NOV	Adn38984 Cancer/an	Adq76690 Human kid	Abp70442 Amino aci	Abp70440 Amino aci	Abp70441 Amino aci	Abp70443 Amino aci		Aar92803 Hepatitis	Adq76691 Human KIM	Aao26678 Human KIM	Ade36629 Human NOV	Ade36622 Plasmid p	Ade36596 Human NOV	Aao26686 Human KIM
SUMMARIES DB ID	2 AAW38336 6 AAO26679	8 ADQ76696	7 ADE36618	/ ADE36592 6 ABR58582	6 ABP70439	6 ABP70438	6 ABR48174	6 AAO26680	7 ADE36594	7 ADN38984	8 ADQ76690	6 ABP70442	6 ABP70440	6 ABP70441	6 ABP70443	_	2 AAR92803	8 ADQ76691	6 AAO26678	7 ADE36629	7 ADE36622	7 ADE36596	6 AAO26686
Length D	334	334	333	7 C	359	359	359	359	359	359	359	364	365	359	364	298	451	518	81	263	263	263	18
% Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2	98.2	82.9	82.9	82.9	81.8	68.7	68.7	68.7	36.7
Score	275	275	275	275	275	275	275	275	275	275	275	275	275	270	270	228	228	228	225	189	189	189	101
Result No.	7 7	m	4 ″≀	n w	7	80	0	10	. 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Aao26687 Human KIM	Aao26673 Monoclona	Aao26688 Human KIM	Aao26685 Human KIM			Abp70431 Amino aci		Adg93318 DEN1 (Pue	Aab78898 C. glutam	Abb04708 Human SP1	Abu00247 Human nov	Adg31674 Human pro	Aag19395 Arabidops	Aag53467 Arabidops	Aag19394 Arabidops	Aag53466 Arabidops	Aag19393 Arabidops	Aag53465 Arabidops	Ado02101 Thalecres
AA026687	AA026673	AA026688	AA026685	ABP70430	AAW38334	ABP70431	ADG93320	ADG93318	AAB78898	ABB04708	ABU00247	ADG31674	AAG19395	AAG53467	AAG19394	AAG53466	AAG19393	AAG53465	AD002101
9	9	9	9	9	~	9	œ	۵	4	Ŋ	9	7	٣	ო	ы	m	m	٣	œ
18	18	18	18	305	307	282	774	775	909	474	474	474	219	249	249	268	268	338	338
0	0	7	۵	7	4	æ	7	7	S	0	0	0	8	æ	8	œ	80	œ	œ
36.	36.	32.	29.	28.	28.	27.	22.	22.	22.	22.	22.	22.0	21.	21.	21.	21.	21.	21.	21.
66	66	90	82	79	78	76.5	62.5	62.5	62	60.5	60.5	60.5	9	9	9	9	9	9	09
36	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ö

Gaps

ö

Length 334;

100.0%; Score 275; DB 6; 100.0%; Pred. No. 7.3e-26;

0; Mismatches

52; Conservative

Best Local Similarity Matches 52; Conserv

Query Match

Sequence 334 AA;

g

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel antibody, antibody derivative or antigen-
binding polypeptide that inhibits proteolytic release of a soluble
kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells.
The antibody, antibody derivative or antigen-binding polypeptide is
useful for treating or preventing renal disease or injury, e.g. renal
cancer. The antibody is also useful for inhibiting shedding of the KIM-1
polypeptide. This sequence represents a protein relating to the KIM-1
protein of the invention
cellular differentiation or reduces apoptosis, e.g. in cases of renal failure, nephritis, kidney transplants, toxic or hypoxic injury. A monoclonal antibody specific for KIM can be used to treat renal disease, e.g. where binding of KIM to light aresults in neoplasia, loss of cellular function, susceptibility to apoptosis or promotion of inflammation, deliver imaging agents to KIM expressing cells in vivo or lan virto and measure KIM concentration by immunossay.

Damage/regeneration of renal cells can be determined by measuring KIM, particularly to diagnose or monitor the progress of disease or therapy. KIM-expressing tumour cells can be inhibited by treatment with a fusion protein comprising KIM ligand or Mab with a toxin or radionuclide, and tumour cells that express KIM ligand can be inhibited with similarly tagged KIM or anti-KIM ligand can be inhibited with similarly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor; kidney injury molecule-1, KIM-1, renal disease, injury, renal cancer; human.
                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                             100.0%; Score 275; DB 2; Length 334; 100.0%; Pred. No. 7.3e-26;
                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 39-40; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KIM-1 related protein, SEQ ID No 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAO26679 standard; protein; 334 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                   52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>د</u>،
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bonventre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BIOGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   renal cancer
                                                                                                                                                                                                                                                                          Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200298920-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA026679;
                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BIOJ)
                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
AAO26679
       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

```
The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (Ig) and mucin domain (TIM) family. This protein has 334 amino acids or 359 amino acids AD076690, depending on splice variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the interaction of T cells and other immune system cells, e.g. dendritic cells, monocytes, macrophages and B cells, and thereby strongly suppresses an IgG response to an antigen. Such treatment also eliminates IgG1 production by memory B cells in response to subsequent challenge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "C-terminal region unique to this splice variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against
                                                                                                                                                                                                                 Human, KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
"Transmembrane domain"
                                                                                                                                                                                      Human kidney injury molecule-1 (KIM-1).
                                                                                                                                                                                                                                                                                                                                                              "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                           258. .260
/note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                      272. .274 /note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 1; 68pp; English.
                                                                                                                                                                                                                                                                                                                     1. .20
/label= Signal_peptide
65. .67
                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                    ADQ76696 standard; protein; 334 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-DEC-2003; 2003WO-US041294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .334
                                                                                                                                                                                                                                                                                                                                                                                                                                 286. .288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note=
                                                                                                                                                                                                                                                                                                                                                               'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or more antigens
                                                                                                                                                                                                                                                                                                                                                                              258.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-534277/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004060041-A2
                                                                                                                                                                                                                                                                                                                                               Modified-site
                                                                                                                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                        Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                    Modified-site
                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                           16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rennert PD;
                                                                                                                                                                                                                                                                                                                     Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     one
                                                                       RESULT 3
ADQ76696
                                                                                                                 ઠે
                             셤
```

```
cc with the antigen. Blockage of the binding of KIM-1 to its receptor reduces secretion of interferon-gamma by immune cells engaged in an antigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention provides methods for therapeutically.

Cc discoveries, the invention provides methods for therapeutically in antigen function in autoimmune diseases and other disorders of the mammalian immune system. A method is claimed for inhibiting ccell, in a mammal. The method involves identifying a mammal with an immune disease or disorder, or one preparing to receive a tissue graft, and administering a KIM-1 antagonist, especially a polypeptide comprising: a KIM-1 if domain, and lacking a transmembrane domain and a KIM-1 cytoplasmic domain, and mati-KIM-1 antibody; or an antigen-binding ccomprising: a mati-KIM-1 antibody, the KIM-1 antagonist is a soluble polypeptide, which can include a keterologous moiety such as an provide antagonist may include a heterologous moiety such as an provide antagonist may be conjugated to a polymer such as an proposition and antisching activation of a B cell in a mammal; inhibiting disease relapse to an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting activation of a B cell in a mammal; inhibiting activation of a B cell in a mammal; inhibiting activation of a B cell in a mammal; inhibiting activation of a B cell in a mammal; inhibiting activation of a B cell in a polymerteritis nodosa, rapidly progressive crescentic glomerulomephritis, attoimmune haemolytic anaemia, Chagas disease, Grave's disease, disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's transaction of disease, ulcerative con systemic lupus nephritis and inhibiting secretion of transaction of transaction of an antiple of the control of disease or disorder (e.g. inflammatory and inhibiting acretion of an antiple of the control of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IFN-gamma by lymphocytes
```

Sequence 334 AA;

```
Gaps
                                                                          249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                          1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                             ;
0
 Length 334;
                             0; Indels
100.0%; Score 275; DB 8; 100.0%; Pred. No. 7.3e-26;
          100.0%; Prec. ...
                             52; Conservative
                Local Similarity
 Query Match
                             Matches
                                                          ð
                                                                                   a
```

ADE36618 standard; protein; 339 AA 29-JAN-2004 (first entry) ADE36618;

Plasmid pCR2.1-CG57008-03-S843 15B protein insert SEQ ID NO:28.

human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing.

Synthetic

Homo sapiens.

WO2003080856-A2

19-MAR-2003; 2003WO-US008490 02-OCT-2003.

19-MAR-2002; 2002US-0365491P. 13-SEP-2002; 2002US-0410618P.

(CURA-) CURAGEN CORP.

Mesri M; Smithson G, Rastelli L, Smiths Giot L, Starling G; Tse K, Guo X, Rieger DK, Anderson DW, Lepley DM, Ooi CE,

WPI; 2003-876927/81. N-PSDB; ADE36617

New polypeptide, useful for preparing a composition for treating or

```
preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
```

Example 1; SEQ ID NO 28; 239pp; English

X is late 1d or 2a to 2h, or its mature form, a sequence that is at conservative substitual to it, or a sequence comprishing one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and variinfilammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents a pCR2.1-GG57008-03-8843 158 protein insert, which is used in an example from the present invention. present invention describes an isolated human NOVX polypeptide,

Sequence 339 AA;

ö Gaps ö 100.0%; Score 275; DB 7; Length 339; 100.0%; Pred. No. 7.5e-26; cive 0; Mismatches 0; Indels 52; Conservative Local Similarity Matches

PLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKGIYAGVCISVL 280 1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52

ò 셤

ADE36592 RESULT

ADE36592 standard; protein; 339 AA

ADE36592;

ő

29-JAN-2004 (first entry)

Human NOV1a protein SEQ ID NO:2.

human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing.

Homo sapiens.

WO2003080856-A2.

02-OCT-2003.

19-MAR-2003; 2003WO-US008490.

19-MAR-2002; 2002US-0365491P. 13-SEP-2002; 2002US-0410618P.

(CURA-) CURAGEN CORP.

Mesri M; Rastelli L, Smithson G, Giot L, Starling G; тве К, Guo X, M, Rieger DK, Anderson DW, Lepley DM, Ooi CE, An

WPI; 2003-876927/81. N-PSDB; ADE36591 New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.

Claim 1; SEQ ID NO 2; 239pp; English.

The present invention describes an isolated human NOVX polypeptide, where X is 1s to 1d or 2s to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has extostration and antilinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for

```
comprises the sequence of any of the genes that are up-regulated or down-
regulated in specific cancers (e.g. about 1031 genes up-regulated or down-
couprises the sequence of any of the genes that are up-regulated in
couprises the sequences which encode the proteins given in
ABR58521 to ABR58709. Also described: (1) determining the presence or
absence of a pathological cell in a patient; (2) an expression vector
comprising a nucleic acid molecule described above; (3) a host cell
comprising the vector; (4) an isolated polypeptide, which is encoded by
the nucleic acid; (5) an antibody that specifically binds the polypeptide
cf (4); (6) specifically targeting a compound to a pathological cell in a
patient by administering to the patient the antibody above; and (7) a
drug screening assay. The nucleic acid is useful as diagnostic markers or
therapeutic targets. In particular, the nucleic acid is useful for
diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow,
bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary,
                                                                                                                                                    ö
treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents human NOVIa from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present invention describes an isolated nucleic acid molecule, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes that are up-regulated or down-regulated in cancers, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           markers for diagnosing e.g. cancer, ischemia or heart diseases, or as therapeutic targets for screening drugs for treating these diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; cancer; diagnosis; screening; modulator; leukaemia; ischaemia;
heart disease; atherosclerosis; endometriosis.
                                                                                                                                                    Gaps
                                                                                                                                                                                                              22
                                                                                                                                                    ö
                                                                                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                               Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wilson KE;
                                                                                                                                                  Indels
                                                                                                              Query Match
100.0%; Score 275; DB 7;
Best Local Similarity 100.0%; Pred. No. 7.5e-26;
Matches 52; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mack DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human cancer related protein SEQ ID NO:239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aziz N, Gish KC, Hevezi PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Page 742; 767pp; English.
                                                                                                                                                                                                                                                                                                                    ABR58582 standard; protein; 359 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0323887P.
2001US-0350666P.
2002US-0355145P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2002; 2002WO-US029560.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-FEB-2002; 2002US-0355257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-0323469P
                                                                                                                                                                                                                                                                                                                                                                                              09-JUL-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-354600/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; ACC72709
                                                                         Sequence 339 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003025138-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-SEP-2001;
13-NOV-2001;
08-FEB-2002;
08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zlotnik A;
                                                                                                                                                                                                                          229
                                                                                                                                                                                                                                                                                                                                                         ABR58582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Afar D,
                                                                                                                                                                                                                                                                                RESULT 6
ABR58582
     SXSSS
                                                                                                                                                                                                                                                                                                                    à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM Polypeptides are cell surface molecules with family conserved IGV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants proteins, which critically regulate CD4 T cell differentiation. Thi cells preferentially express TIM-1. TIM polypeptides and polymuclocities are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
pancreas, prostate, skin and uterus), wounds, ischaemia, heart diseases, atherosclerosis and endometriosis. The nucleic acid is also useful in drug screening, particularly for identifying agents for treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3;
                                                                                                                                                               Gaps
                                                                                                                                                                                                                  249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLIANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kuchroo V;
                                                                                                                                                                 .
0
                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                          Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 275; DB 6; Length 359; 100.0%; Pred. No. 8e-26;
                                                                                                                            100.0%; Score 275; DB 6; Length 3 100.0%; Pred. No. 8e-26; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 10; Page 82; 94pp; English.
                                                                                                                                                                                                                                                                                                                         ABP70439 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcintire JJ, Dekruyff RH,
                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; ABZ68333.
                                                                                             Ą.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                           Sequence 359
                                                                                                                                                                                                                                                                                                                                                                                               22-APR-2003
                                                          pathologies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                            ABP70439;
                                                                                                                                                                                                                                                                                          RESULT 7
                                                                                                                                                                                                                                                                                                         ABP70439
       8888888
                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                           ò
```

```
Detecting a bladder cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a bladder cancer-associated polynucleotide or antibody.
                                                                                                                                                  Human bladder cancer associated protein sequence SEQ ID NO:64.
                                                                                                                                                                                                      Human; bladder cancer; cytostatic; gene therapy; vaccine.
     ABR48174 standard; protein; 359 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 10; Page 252; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EOSB-) - EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-201532/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mack DH, Aziz N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ACC50985
                                                                                                                                                                                                                                                                                                 WO2003003906-A2.
                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                       03-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-2001;
                                                                                                   12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                     16-JAN-2003
  ò
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM polypeptides are cell surface molecules with conserved IGV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM genetically associated within a region of human chromosome 5 that is commonly deleted in mallgnancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM protection against these responses. T cells express protectins, which critically responses Tall differentiation. This preferentially express TIM-1. TIM polypeptides and polymolectides are useful for treating cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                         T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immunoglobulin doscinor; carconsome 5; malignancy; allergy; eczema; myelodygplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
  Gaps
                                                                           249 PLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 275; DB 6; Length 359; 100.0%; Pred. No. 8e-26; ive 0; Mismatches 0; Indels
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                             Amino acid sequence of human TIM-1 allele 1.
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dekruyff RH, Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 10; Page 80-81; 94pp; English.
                                                                                                                                                                                                                           ABP70438 standard; protein; 359 AA
  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                           (first entry)
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        asthma, allergies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; ABZ68332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcintire JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                         22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JAN-2003.
52;
                                                                                                                                                                                                                                                                          ABP70438;
  Matches
                                                                                                                                                                      ABENUT 8
ABP70438
ABP70438
AC ABP7
AC 
                                                 ð
                                                                                             g
```

; 2001US-0302814P. ; 2001US-0310099P. ; 2001US-0343705P. ; 2001US-0350666P.

2002WO-US021338

```
The present invention describes a method for detecting a bladder cancerassociated transcript in a cell from a patient. The method comprises contacting a biological sample from the patient with a polymuclecide that selectively hybridises to a sequence that is 80 % identical to a table of sequences (see ACC50951 to ACC51059). ACC50951 to ACC51059 accorded the human bladder cancer-associated proteins given in ABR48146 to ABR48242). Bladder cancer-associated proteins given in haRR48146 to have cytostatic activities, and can be used in antisense gene therapy and in vaccine production. The method can be used for detecting a bladder cancer associated transcript in a cell from a patient. The method is useful in diagnosing or treating bladder cancer and in screening for compounds that modulate bladder cancer, such as hormones or antibodies. The nucleic acid molecules from the present invention may be used in various screening and diagnostic methods, and for gene therapy, vaccine and/or antisense/inhibition applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIXAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO26680 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KIM-1 related protein, SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA026680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA026680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SXXXEXB
```

ö

Gaps

. 0

PLYSYTTDGNDTVTESSDGL#NNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300

249

셤

RESULT 9 ABR48174

PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL

52; Conservative

Matches

Query Match Best Local Similarity

```
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-MAY-2003.
                           줊
                                                                                                                                                                                                                                                                                                                                                                                     ADN38984;
                          Lepley D
                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                            ADN38984
g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                The invention relates to a novel antibody, antibody derivative or antigen
                                                                                                                                                                                                                                                                                         -binding polypeptide that inhibits proteciytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1
                                                                                                                                                                                                                New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing.
       Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release; inhibitor; kidney injury molecule-1, KIM-1, renal disease; injury, renal cancer; human.
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                      DB 6; Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 275; DB 6
100.0%; Pred. No. 8e-26;
                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Pred. No.
                                                                                                                                                                                                                                                                Disclosure; Page 40-41; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE36594 standard; protein; 359 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human NOV1b protein SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                                                                                      01-JUN-2001; 2001US-0295449P.
                                                                                                    31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-MAR-2003; 2003WO-US008490
                                                                                                                                                  (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 52; Conservative
                                                                                                                                                                                                                                                                                                                                        polypeptide. This sequend
protein of the invention
                                                                                                                                                                             Bailly V, Bonventre J;
                                                                                                                                                                                               WPI; 2003-156845/15.
                                                                                                                                                                                                                                            e.g. renal cancer
                                                                                                                                                                                                                                                                                                                                                                    Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003080856-A2.
                                                                WO200298920-A1
                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ношо варіепв
                                                                                  12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE36594;
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
```

```
ö
                                                                                                                                                                                                                                             New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                    where
                                                                                                                                                                                                                                                                                                                                                                                                                                                              X is la to 1d or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents human NOV1b from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, differential expression, cancer, angiogenic disorder, fibrotic disorder, psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory disease, autoimmune disease, retina neovascularistaion syndrome; scarring, uterine fibroid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes an isolated human NOVX polypeptide,
                                                         Ξ̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIXAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:302.
                                                            Mesri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 7; Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 275; DB 7; Length 3 100.0%; Pred. No. 8e-26; ive 0; Mismatches 0; Indels
                                                         Smithson G,
                                                                                      Starling G;
                                                            Rastelli L,
                                                                                      Giot L,
                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 4; 239pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADN38984 standard; protein; 359
                                                         Tse K,
Guo X, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-NOV-2001; 2001US-0332464P.
29-NOV-2001; 2001US-0332394P.
14-DEC-2001; 2001US-035394P.
14-DEC-2001; 2001US-034937P.
08-JAN-2002; 2002US-0347211P.
10-JAN-2002; 2002US-0355250P.
13-FEB-2002; 2002US-0355250P.
20-FEB-2002; 2002US-035520P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0
....hes 52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                      Anderson DW,
(CURA-) CURAGEN CORP
                                                                                                                                                      WPI; 2003-876927/81.
                                                            Rieger
                                                                                                                                                                                      N-PSDB; ADE36593.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003042661-A2
```

```
whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods to determining the presence or absence of a pathological cell in a patient by detecting a mucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, attencederosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                       Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
                                                                                                                                                                                                                               Glynne R, He
E, Zlotnik A;
                                                                                                                                                                                                                               Gish KC, Gl
Wilson KE,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 12; SEQ ID NO 302; 1385pp; English.
                                                                                                                                                                                                                               Aziz N, Ginsburg WM, Murray R, Watson SR,
                                                                                                                                                                                        (EOSB-) EOS BIOTECHNOLOGY INC.
                                    12-APR-2002; 2002US-0372246P
05-UIN-2002; 2002US-0386614P
16-UUL-2002; 2002US-0396839P
22-UIL-2002; 2002US-0397775P
22-UIL-2002; 2002US-0397845P.
2002US-0368809P
2002US-0370110P
                                                                                                                                               09-SEP-2002; 2002US-0409450P
                                                                                                                                                                                                                                                                                            WPI; 2003-468649/44.
N-PSDB; ADN38983.
29-MAR-2002;
04-APR-2002;
                                                                                                                                                                                                                               ο,
DH,
                                                                                                                                                                                                                                                   Mack
```

Sequence 359 AA;

Gaps 249 PLYSYTTDGNDTVTESSDGLMNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300 22 ö 1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 7; Length 359; 0; Indels 100.0%; Score 275; DB 7; 100.0%; Pred. No. 8e-26; iive 0; Mismatches 0 52; Conservative Query Match Best Local Similarity datches ઠ ద

ö

ADQ76690 standard; protein; 359 AA (first entry) 16-DEC-2004 ADQ76690; RESULT 13 ADQ76690
XX
AC ADQ7
XX
XX
DT 16-E
XX
KW Hume
KW musc
KW musc
KW musc
KW mts
KW

Human kidney injury molecule-1 (KIM-1).

Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide; muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic; antiallergic; antiinflammatory; vasotropic; nephtropic.

Homo sapiens

1. .20 /label= Signal_peptide 65. .67 /note= "N-glycosylated" Modified-Bite Peptide

Location/Qualifiers

"C-terminal region unique to this splice variant" /note= "Transmembrane domain" /note= "N-glycosylated" 272. :274 /note= "N-glycosylated" "N-glycosylated" 324. .359 /note= "C-286. .288 /note= ' 290, 31 Modified-site Modified-site Modified-site Domain Region

WO2004060041-A2

Hevezi PA;

22-JUL-2004

29-DEC-2003; 2003WO-US041294.

30-DEC-2002; 2002US-0436934P.

(BIOG-) BIOGEN IDEC MA INC.

Rennert PD;

WPI; 2004-534277/51.

Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.

Disclosure; SEQ ID NO 1; 68pp; English.

The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (IIM) family. This protein has 344 amino acids to AD076656 or 359 amino acids, depending on splice variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the discovered that treatment of a mammal with a KIM-1 antagonist alters the cline and other immune system cells, e.g. dendritic cells, monocytes, macrophages and B cells, and thereby strongly strongly production by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor with the antigen. Blockage of the binding of KIM-1 to its receptor attigen response in the mixed lymphocyte response assay. Based on these conclusions and the marked lymphocyte response assay. Based on these discoveries, the invention provides methods for therapeutically condulating between a T cell and a second cell, e.g. an antigen-presenting signalling between a T cell and a second cell, e.g. an antigen-presenting signalling between a T cell and a second cell, e.g. an antigen-presenting signalling between a T cell and a second cell, e.g. an antigen-presenting signalling a KIM-1 antagonist, sepecially a polypeptide comprising a KIM-1 antagonist, sepecially a polypeptide comprising a KIM-1 antagonist, sepecially a polypeptide comprising a KIM-1 antagonist, sepecially a polypeptide of an anti-KIM-1 antibody. Preferologous moiety such as an Rc contible polypeptide, which can include a heterologous moiety such as an Rc contible polypeptide, which can include a heterologous moiety such as an Rc moiety. The antagonist may be conjugated to a polymer such as polymer and activation of a B cell in a mammal, inhibiting activation of a B cell in a mammal in antidemina gravia, inhibiting activation of a B ell in a mammal in antideminal antideminal polymentyle and polymentyle and an antideminal polymentyle and an antideminal polymentyle and an antideminal polymen idiopathic thrombocytopenia purpura, Wegener's granulomatosis, polyarteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of IFN-gamma by lymphocytes.

Sequence 359 AA;

Score 275; DB 8; Length 359; Pred. No. 8e-26; 100.0%; 100.0%; Best Local Similarity Query Match

r cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3;

Amino acid sequence of human TIM-1 allele 3.

(first entry)

22-APR-2003

ABP70440;

ABP70440 standard; protein; 365 AA

TIM-4, immune dysfunction; chromosome 5; malignancy; allergy; ecze myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.

Location/Qualifiers

Misc-difference 208

Homo sapiens

œ

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM protectins, which critically regulate CD4 T cell differentiation. The cells preferentially express TIM-1. TIM polypeptides and polymucleotides are useful for treating cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
Gaps
                                                                                                                 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 364;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 275; DB 6; ilarity 100.0%; Pred. No. 8.1e-26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amino acid sequence of human TIM-1 allele 5.
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 10; Page 86-87; 94pp; English
                                                                                                                                                                                                                                                                                                                    ABP70442 standard; protein; 364 AA
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dekruyff RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ABZ68336.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 364 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcintire JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JAN-2003
   52;
                                                                                                                                                                                                                                                                                                                                                                                      ABP70442;
                                                                                                                                       249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                              RESULT 14
ABP70442
ABP70442
AC ABP70
XX ABP70
XX ABP70
XX AMIO
XX T Cell
XW TIM-44
XW MYELO
XX HOMO
XX AMIO
XX AMIO
XX MPL;
XX MPL;
XX MPL;
XX MPL;
XX MIO
XX AMIO
XX MPL;
XX MIO
X
   Matches
                                                                     ઠે
                                                                                                                                    셤
```

```
The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with family conserved IGV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants proteins, which critically regulate CD4 T cell differentiation. Thi cells preferentially express TIM-3, while TH2 cells preferentially express TIM-1. TIM polypeptides and polymuclocides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 255 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 275; DB 6;
100.0%; Pred. No. 8.2e-26;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Umetsu DT,
                                                                                                                                                                                                                                                                        /note= "encoded by RCG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search completed: June 29, 2005, 09:09:09 Job time: 37.9823 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                        (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 10; Page 83-84; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                         01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                       29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcintire JJ, Dekruyff RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-210268/20.
N-PSDB; ABZ68334.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 365 AA;
                                                                                                                                                                                                                                                                                                        WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                         09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

ö

ö,

Gaps

; 0

Indels

ö

Best Local Similarity Matches 52; Conser

ઠ

254 PLYSYTTDGNDTVTESSDGLMNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 305

RESULT 15 ABP70440

1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52

3352, Ap 217, App 217, App 217, App 191, App 315, App 220, App 220, App 197, App 197, App 197, App 197, App 321, App 321, App 323, App 2203, App

Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence

Run on:

```
100.0%; Score 275; DB 4; Length 334; 100.0%; Pred. No. 1.2e-28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: «Unknown»
PRIOR APPLICATION APPA:
APPLICATION NUMBER: US 60/018,228
RILING DATE: 24-MAY-1996
ATORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 35,245
REGISTRATION NUMBER: 35,245
REGISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE REGENERATION
                                                                                                                                                                                                                                                                                                                               US-08-467-602-203
US-08-411-295F-327
US-09-248-796A-25339
                                      US-08-470-335-217
US-08-470-339-217
US-08-467-602-191
US-08-411-295F-315
US-08-411-295F-315
US-08-411-295F-316
US-08-467-602-200
US-08-467-602-200
US-08-467-602-197
US-08-411-295F-324
US-08-411-295F-321
US-08-411-295F-321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 7, Application US/09197970B
Patent No. 6664385
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Michele Sanicola-Nadel
Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
Henry Wei
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TIS
NUMBER OF SEQUENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 1
C
                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TOPOLOGY: linear;
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-197-970B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MA
COUNTRY: USA
ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (6.77) 679-2838
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 334 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
US-09-197-970B-7
  Sequence 7, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 56, Appli
Sequence 5, Appli
Sequence 746, Ap
Sequence 13, Appli
Sequence 13, Appli
Sequence 2771, Ap
Sequence 2771, Ap
Sequence 2771, Ap
Sequence 215, Appl
Sequence 215, Appl
Sequence 215, Appl
Sequence 11, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 7347, Ap
Sequence 21669, A
Sequence 266, App
Sequence 241, App
Sequence 18758, A
Sequence 3159, Ap
                                                                                                                                               June 29, 2005, 08:57:16 ; Search time 7.15128 Seconds (without alignments) 542.805 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
                                                                                                                                                                                                                                    US-10-718-321-7_COPY_249_300
275
1 PLYSYTTDGNDTVTESSDGL......SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                  version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-328-352-7347
US-09-248-796A-21669
US-09-489-847-366
US-09-489-847-241
US-09-248-796A-18758
US-09-134-001C-3159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-197-970B-7
US-08-287-001A-2
US-09-197-970B-3
US-09-107-970B-3
US-08-168-091A-2
US-08-168-091A-2
US-08-428-926-5
US-08-428-926-5
US-08-428-927-5
US-08-428-927-5
US-08-428-927-5
US-08-139-517-5
US-09-91-258-157-1
US-09-91-258-157-1
US-09-691-270A-24
US-09-375-140-11
US-09-375-140-11
                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                             513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                        OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                    GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         606
602
602
602
602
602
1070
1039
1039
495
463
323
323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19.5
19.5
19.5
                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54.5
54.5
54.5
54.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53.5
53.5
53.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
```

Result No.

```
TELEFAX: 404/688-9880
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02142
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 451 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US95-09941-2
                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-197-970B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
  ö
  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                       249 PLYSYTTDGNDTVTESSDGLWNNNOTOLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             329 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEGIYAGVCISVL 380
                                          1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                  Sequence 2. Application US/08287001A
Sequence 2. Application US/08287001A
Patent No. 5622861
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: KAPLAN, GERARDO
APPLICANT: KAPLAN, GERARDO
APPLICANT: FINSTONE, STEPHEN M.
TITLE OF INVENTION: HEPATITIS A VIRUS RECEPTOR AND METHODS
TITLE OF INVENTION: OF USE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: NEEDLE & ROSENBERG, P.C.
STREET: Suite 1200, The Candler Bldg, 127 Peachtree
STREET: Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: HEPATITIS A VIRUS RECEPTOR AND METHODS TITLE OF INVENTION: OF USE NUMBER OF SEQUENCES: 5 CORRESPONDENCE ADDRESS: ADDRESSE: NEELE & ROSENBERG, P.C. STREET: Suite 1200, The Candler Bldg, 127 Peachtree STREET: Street CITY: ALbata STATE: Georgia COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 228; DB 1; Length 451;
Pred. No. 3.5e-22;
2; Mismatches 6; Indels
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: COMPUTER: Patent PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/287,001A
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Spratt, Gwedolyn D.
REGISTRATION NUMBER: 36,016
REFERENCE/DCCKET NUMBER: 1414.621
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404/688-0770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application PC/TUS9509941
GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 404/686-5002
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 451 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.9%;
84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
Best Local Similarity 84.c.
Best Local 44; Conservative
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Atlanta
STATE: Georgia
COUNTRY: USA
ZIP: 30303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCT-US95-09941-2
                                                                                                                                                                       JS-08-287-001A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-287-001A-2
  Matches
                                            ò
                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 329 PLYSYTTDGSDTVTESSDGL#NNNQTQLSPEHSPQMVNTTEGIXAGVCISVL 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
82.9%; Score 228; DB 5; Length 451;
Best Local Similarity 84.6%; Pred. No. 3.5e-22;
Matches 44; Conservative 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APLICATION DATA:
APPLICATION NUMBER: US/09/197,970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: «UNKNOWN»
PRIOR APPLICATION: «UNKNOWN»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Takahari Ichimura
Henry Wei
Richard L. Cate
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/09941
FILING DATE:
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/287,001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/287,001
FILING DATE: ANG 1994
ATORNEY/AGENT INFORMATION:
NAME: Spratt, Gwedolyn D.
REGISTRATION NUMBER: 36,016
REGISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: A010 PCT CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Joseph V. Bonventre
Catherine A. Hessio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/09197970B Patent No. 6664385 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
```

ò

```
1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGI 43
                                                                                                                                                                                                                                      APPLICANT: Fischbach, Gerald.
APPLICANT: Falls, Douglas R.
APPLICANT: Rosen, Kenneth M.
APPLICANT: Rosen, Kenneth M.
APPLICANT: Corfas, Gabriel
TITLE OF INVENTION: Neurotrophic Factor
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZUP: 102109
ZUP: 102109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMFUTER: IBM PC COMPALINE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/168,091A
FILING DATE: 15-DEC-1993
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: LAHIVE AND COCKFIELD
60 State Street, Suite 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA

APPLICATION NUMBER: 07/953,742
FILING DATE: 29-28RE-1992
ATTORNEY/AGENT INFORMATION:
NAME: DECONT, Glulio A
REGISTRATION NUMBER: 31.503
REFERENCE/DOCKET NUMBER: HMI-002C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-5941
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                          Sequence 2, Application US/08168091A Patent No. 5665862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/08428926 Patent No. 5667780 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 602 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 31.7%
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-168-091A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                   US-08-168-091A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-428-926-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
     ઠે
                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Haberhauler, Gregor
APPLICANT: Gregor
APPLICANT: Gregor
APPLICANT: Kim, Hyung-Joon
TITLE OF INVENTION: CORREBEACTERIUM GLUTAMICUM GENES ENCODING STRESS,
TITLE OF INVENTION: CORREBEACTERIUM GLUTAMICUM GENES ENCODING STRESS,
TITLE OF INVENTION: CORREST STRANCE AND TOLERANCE PROTEINS
FILE REFERENCE: BGI-124CP
CURRENT FILING DATE: 2000-06-23
PRIOR PILING DATE: 2000-06-23
PRIOR PILING DATE: 1999-06-25
PRIOR PELING DATE: 1999-07-01
PRIOR PILING DATE: 1999-07-03
PRIOR PILING DATE: 1999-07-04
PRIOR PILING DATE: 1999-07-06
PRIOR PILING DATE: 1999-07-07
PRIOR PILING DATE: 1999-07-14
PRIOR PILING DATE: 1999-08-27
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                               4 SYT-TDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                            Query Match 28.4%; Score 78; DB 4; Length 307; Best Local Similarity 42.0%; Pred. No. 0.026; Matches 21; Conservative 7; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 62; DB 4; Length 606;
Pred. No. 8.7;
5; Mismatches 24; Indels
                                                                                                                                                                                     TOPOLOGY: linear

MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-197-970B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-09-603-208A-56
                       TELEPHONE: (617) 679-2810
TELEFAX: (617) 679-2818
INFORMATION FOR SEG ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 307 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-603-208A-56
; Sequence 56, Application US/09603208A
; Patent No. 6822084
TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schroder, Hartwig
Zelder, Oskar
Haberhauer, Gregor
Lee, Heung-Shick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pompejus, Markus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 22.5
Best Local Similarity 32.6
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 56
LENGTH: 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
APPLICANT: Ho, Wei-Haien
APPLICANT: Ho, Wei-Haien
APPLICANT: Osheroff, Phyllis L.
TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
TUTHE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
CORRESPONDENCE ADDRESS:
ADDRESSE: Genetech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.8%; Score 60; DB 1; Length 602; 31.7%; Pred. No. 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11; Mismatches 15; Indels
559 PLVEYQKEGGDMFNGMKDGIKEETVRQLFLSASSSSKTRKSL 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 YISTTHHSMIVIQIPSHSWSNGHIESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
```

ï

Gaps

5

```
RESULT 9
US-08-428-298-5
i Sequence 5, Application US/08428298
j Patent No. 5763213
j GENERAL INFORMATION:
j APPLICANT: HO, Wei-Heien
j APPLICANT: OSheroff, Phyllis L.
TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
j NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
j ADDRESSE: Genentech, Inc.
street: 460 Point San Bruno Blvd
j CITY: South San Francisco
j STATE: Callifornia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 21.8%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 16; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                  21.8%; Score 60; DB 1; Length 602; 31.7%; Pred. No. 16;
                                                                                                                                                                                                                                                    15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |: || : || |: || |: | |: | 301 YISTTHHSMTVTQTPSHSWSNGHTESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                    3 YSYTIDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READBLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,298
FILING DATE: 25-APR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/339517
FILING DATE: 14-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 853D2
TELECHMONICATION INFORMATION:
TELEPHONE: 415/252-1994
                                                                                                                                                                                                                                                  11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
US-08-339-517-5
Sequence 5, Application US/08339517
; Patent No. 5770567
INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS: LENGTH: 602 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 602 amino acids
                                                                                                                                                                                                                           Best Local Similarity 31.7%
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94080
                                                                                                                                                    US-08-428-927-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-428-298-5
                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <del>.</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/08428927

Sequence 5. Application US/08428927

Patent No. 5756456

GENERAL INFORMATION:

APPLICANT: Ho, Wei-Haien

APPLICANT: Osheroff, Phyllis L.

TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)

NUMBER OF SEQUENCES: 5

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 460 Point San Bruno Blvd

CITY: South San Francisco

STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 21.8%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 16; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                      COMPUTER KEALANEL FUGA,

MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,926
FILING DATE: 25-PR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/33517
FILING DATE: 14-NOV-1994
ATTORNEY/AGBYT INFORMATION:
NAME: Lee, Wendy M:
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 853D4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/25-1994
TELEPHONE: 415/25-1994
TELERATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 94080
COMPUTER READABLE FORM:
MEDUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Generical)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COERTHING SIGHER:
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,927
FILING DATE: 25-APR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/339517
FILING DATE: 14-NOV-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 853
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 602 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            415/952-9881
                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-428-927-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

1;

Gaps

5,

```
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-328-352-6746
                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-991-258-13
                                                                                                                                                                                                                                                                                                          US-08-697-954-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Role, Lorna W.
APPLICANT: Role, Lorna W.
TITLE OF INVENTION: SPLICE VARIANTS OF THE HEREGULIN GENE, DARIA, AND TITLE OF INVENTION: USES THEREOF NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
GENERAL INFORMATION:
APPLICANT: Ho, Wei-Heien
APPLICANT: Obneroff, Phyllis L.
TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
NUMBER OF SEQUENCES:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 21.8%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 16; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 YISTTHHSMTVTQTPSHSWSNGHTESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/697,954
                                                                                                                                                                                                                                                                      COMPUTER READBLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: 1BM PC compatible
OPERATING SYSTEM:
PC-DOS/MS-DOS
SOFTWARE: patin (Genenceh)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/339,517
FILING DATE: 14-NOV-1994
CLASSIFICATION DATA:
APPLICATION NUMBER: PLICATION DATA:
APPLICATION NUMBER:
PILING DATE:
APPLICATION NUMBER: 00,000
REGISTRATION NUMBER: 00,000
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 05.000
REFERENCE/DOCKET NUMBER: 05.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/08697954 Patent No. 6284535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPAONE: 415/225-1994
TELEFAX: 415/952-9881
TELEX: 910/31-7168
INFORMATION FOR SEG ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 602 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: New York
                                                                                                                                                                                                                                                          94080
                                                                                                                                                                                                          STATE: C. COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-339-517-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-697-954-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
APPLICANT: Maughan, Maureen
APPLICANT: Johnston, Robert
APPLICANT: Johnston, Robert
APPLICANT: Johnston, Robert
APPLICANT: Davis, Nancy
APPLICANT: Swanstron, Ronald
TITLE OF INVENTION: WACCINES
TITLE OF INVENTION: WACCINES
FILE REPERENCE: 01113.0001U3
CURRENT APPLICATION NUMBER: US/09/991,258
CURRENT FILING DATE: 2001-11-16
PRIOR FILING DATE: 2001-11-16
PRIOR PLICATION NUMBER: 09/902,537
PRIOR PLICATION NUMBER: 09/216,995
PRIOR FILING DATE: 2000-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-328-352-6746

Sequence 6746, Application US/09328352

Patent No. 652958

GENERAL INFORMATION:

TITLE OF INVENTION: BAUMANNI FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: BAUMANNI FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: GTC99-03PA

CURRENT APPLICATION NUMBER: US/09/328,352

CURRENT FILING DATE: 1999-06-04

NUMBER OF SEQ ID NOS: 8252

SEQ ID NO 6746
                                                                                                                                                                                                                                                                                                                                                                                        ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                      5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 YSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISV 51
                                                                                                                                                                                                                                                                                                                                       DB 3; Length 1070;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21.8%; Score 60; DB 4; Length 1260; 32.7%; Pred. No. 41;
                                                                                                                                                                                                                                                                                                                                                                                      11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9; Mismatches
                                                                                                                                                                                                                                                                                                                                       Query Match 21.8%; Score 60; Best Local Similarity 31.7%; Pred. No. Matches 13; Conservative 11; Mismatc
                                                        46839-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13, Application US/09991258
Patent No. 6783939
REFERENCE John P.
REGISTRATION NUMBER: 28,678
REFERENCE DOCKET NUMBER: 46835
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0526
INFORMATION FOR ESQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1070 amino acids
TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Acinetobacter baumannii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 32.7
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PATEMIN NO. THEORYATION:
APPLICANT: Olmsted, Robert
APPLICANT: Keith, Paula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dryga, Sergey
Caley, Ian
```

```
86 GTVAIKQKADSLANHLQTRRFGRLELLAHSIINVPSNDGIY 126
                                                                        Search completed: June 29, 2005, 09:02:59 Job time: 7.15128 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2711, Application US/09540236

Patent No. 6673910
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATAR
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2005-001
CURRENT APPLICATION NUMBER: US/09/540,236
CURRENT FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 3840
SEQ ID NO 2771
LENGTH: 137
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-270-767-41514

Sequence 41514, Application US/09270767

Sequence 41514, Application US/09270767

Sequence 41514, Application US/09270767

Sequence 41514, Application US/09270767

GENERAL INFORMATION:

TITLE OF INVENTION:

FILE REFERENCE: FILE Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270, 767

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PatentIN Ver. 2.0

SEQ ID NO 41514

LENGTH: 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                             ) OTHER INFORMATION: Description of Artificial Sequence; No. 6783939e; OTHER INFORMATION: synthetic construct
US-09-991-258-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
?;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4; Length 1039;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 20.2%; Score 55.5; DB 4; Length 137; Best Local Similarity 31.7%; Pred. No. 9.8; Matches 13; Conservative 8; Mismatches 15; Indels 9
                                                                                                                                                                                                                                                                                Query Match 21.1%; Score 58; DB 4; Length 981; Best Local Similarity 47.6%; Pred. No. 55; Matches 10; Conservative 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           219 TSAGNSTSADNSSTPKDNSTAQLLAD---LTINFEETIFABICL 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 20.5%; Score 56.5; DB 4; Length 1 Best Local Similarity 31.8%; Pred. No. 94; Matches 14; Conservative 10; Mismatches 17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 TIDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCI 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9 GNDTVTESSDGLWNNNOTQLF----LEHSLLTANTTKGIY 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-41514
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
LENGTH: 981
                                                                                                                                                                                                                                                                                                                                                                                                                         11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Drosophila melanogaster
FEATURE:
                                                                                                     TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: M.catarrhalis
US-09-540-236-2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-09-540-236-2771
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

Sequence Sequence

```
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/655,506
FILING DATE: 04-Sep-2003
CLASSIFCATION: cUnknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970
FILING DATE: 23-NOV-1998
FILING DATE: 23-NOV-1996
FILING DATE: 24-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE REGENERATION
US-10-718-321-8
US-10-847-918-25
US-10-188-012-25
US-10-188-012-21
US-10-188-012-21
US-10-188-012-21
US-10-663-497-23
US-10-663-497-23
US-10-663-497-23
US-10-663-497-23
US-10-188-012-27
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-391-3934-39
US-10-663-497-11
US-10-41-963-136644
US-10-424-599-255038
US-10-424-599-250078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-425-115-288232
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-663-497-5
US-10-663-497-7
                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-188-012-5
US-10-188-012-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     %30-655-506-7
%Sequence 7, Application US/10655506
publication No. US20050089868A1
GENERAL INFORMATION:
APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: MUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: MA
COUNTRY: USA
ZIP: 02142
COMPUTER READABLE FORM:
 76.5
76.5
66
                                                                                                                                                                                                                                                                                                                             60.5
  Sequence 19, Appl
Sequence 302, App
Sequence 64, Appl
Sequence 4, Appl
Sequence 17, Appl
Sequence 19, Appl
                                                                                                June 29, 2005, 08:58:20 ; Search time 32.5894 Seconds (without alignments) 613.589 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence Sequence Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                     US-10-718-321-7_COPY_249_300
275
1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                           Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US07_BUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_DUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                    1717557
                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-655-506-7
US-10-718-321-7
US-10-391-939A-2
US-10-191-939A-2
US-10-188-012-17
US-10-188-012-19
US-10-188-832-64
US-10-188-832-64
US-10-663-497-17
US-10-663-497-17
                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                        1717557 segs, 384547976 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                      - protein search, using sw model
                                                                                                                                                                                                                             Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1000.0
1000.0
1000.0
                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                      Perfect score:
                                                                      OM protein
                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                 Run on:
```

Result Š.

Sequence 21, Appl Sequence 14, Appl Sequence 239255, Sequence 255038, Sequence 37036, A Sequence 514, Appl Sequence 51078,

5, Appli 7, Appli 5, Appli 7, Appli 288232,

Sequence Sequence Sequence

Sequence

Sequence

Sequence 21, Appl Sequence 23, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 6, Appli Sequence 13, Appl Sequence 19, Appl Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 3, Appli

```
US-10-188-012-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLIANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 275; DB 17; Length 334; 100.0%; Pred. No. 4.2e-28; ative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
100.0%; Score 275; DB 17; Length 334;
Best Local Similarity 100.0%; Pred. No. 4.2e-28;
Matches 52; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bonventre, Joseph
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Shedding of KIM-1
FILE REFERENCE: A124 US
CURRENT APPLICATION NUMBER: US/10/718,321
CURRENT APPLICATION NUMBER: 00/295449
PRIOR APPLICATION NUMBER: 60/295907
PRIOR PILLING DATE: 2001-06-01
PRIOR PILLING DATE: 2001-06-04
PRIOR FILLING DATE: 2001-06-04
PRIOR PRIOR PRIOR DATE: 2001-06-04
PRIOR PRIOR PRIOR DATE: 2001-06-04
PRIOR APPLICATION UNMBER: PCT/US02/17402
PRIOR FILLING DATE: 2001-06-04
PRIOR FILLING DATE: 2001-06-04
PRIOR APPLICATION UNMBER: PCT/US02/17402
PRIOR FILLING DATE: 2001-06-04
PRIOR PRIOR PRIOR DATE: 2001-06-04
PRIOR PRIOR PRIOR DATE: 2001-06-04
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRI
                                  NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: A010 PCT CIP
TELEPONMUNICATION INFORMATION:
TELEPONE: (617) 679-2810
TELEPONE: (617) 679-2838
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 334 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-655-506-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/10391939A; Publication No. US20050014687A1; GENERAL INFORMATION:
APPLICANT: Anderson, David W.; APPLICANT: Gloc, Loic; APPLICANT: Guo, Xiaojia Sasha; APPLICANT: Hepley, Denise M.; APPLICANT: Mesri, Mehdi ; APPLICANT: Ooi, Chean Eng;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 7, Application US/10718321
; Publication No. US20050112117A1
; GENERAL INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Biogen Idec Ma Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Simil
Matches 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-391-939A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-718-321-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
APPLICANT: Rastelli, Luca;
APPLICANT: Rieger, Daniel K.;
APPLICANT: Smithson, Glennda;
APPLICANT: Smithson, Glennda;
APPLICANT: Smithson, Glennda;
APPLICANT: Startling, Gary;
APPLICANT: Startling, Gary;
APPLICANT: THE KAMERING GARY;
APPLICANT: THE APPLICANTON: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODE;
FILE REPREBNCE: 21402-048
CURRENT PILING DATE: 2003-03-19
PRIOR APPLICATION NUMBER: 60/365,491
PRIOR APPLICATION NUMBER: 60/365,491
PRIOR APPLICATION NUMBER: 60/410,618
PRIOR FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 2
LENGTH: 339
HADDEL LENGTH: 339
HADDEL LENGTH: 339
HADDEL LENGTH: 339
HADDEL LENGTH: 339
HADDEL LENGTH: 339
HADDEL LENGTH: 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Xiaojia Sasha;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Lepley, Denise M.;
APPLICANT: Mesri, Mehdi;
APPLICANT: Mesri, Mehdi;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Starling, Gary;
APPLICANT: Gilengraf, Gary;
APPLICANT: Gilengra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  229 PLYSYTTDGNDTVTESSDGL#NNNQTQLFLEHSLLTANTTKGIXAGVCISVL 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            229 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 275; DB 17; Length 339; 100.0%; Pred. No. 4.2e-28; ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 275; DB 17; Best Local Similarity 100.0%; Pred. No. 4.2e-28; Matches 52; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 28, Application US/10391939A Publication No. US20050014687A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.7
Matches 52, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-391-939A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
US-10-391-939A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
```

```
Sequence 302, Application US/10295027
Publication No. US20030232350Al
GENERAL INFORMATION:
                                                                                                                                                                              Aziz, Natasha
Ginsberg, Wendy M.
Gish, Kurt C.
                                                                                                                                                                                                                                                      Glynne, Richard
Hevezi, Peter A.
Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-10-295-027-302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 275; DB 14; Length 359; 100.0%; Pred. No. 4.6e-28; Aative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 275; DB 14; Length 359; 100.0%; Pred. No. 4.6e-28; tive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19, Application US/10188012
; Sequence 19, Application US/10188012
; Publication No. US20030124114A1
; GENERAL INFORMATION:
; APPLICANT: McIntire, Jennifer Jones
; APPLICANT: Uneteu, Jale T.
; APPLICANT: Exchroo, Vijay
; APPLICANT: Freeman, Gordon J.
; TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
; TITLE OF INVENTION: T Cell Regulatory
; TITLE OF INVENTION: T Cell Regulatory
; FILE REPERENCE: STAN-235
; CURRENT APPLICATION NUMBER: US/10/188,012
; CURRENT FILING DATE: 2002-07-01
; PRIOR PILING DATE: 2002-07-01
; PRIOR PILING DATE: 2001-06-29
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENTING DATE: DATE
; DENTIFE DESCRIPTION NUMBER: CONTINE DATE
; SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                            APPLICANT: Unetsu, Dale T. D. APPLICANT: Excernant, Gordon J. TITLE OF INVENTION: T Cell Regulatory Genes and Methods of TITLE OF INVENTION: TOE Thereof; FILE REPRENCE: STAN-235 CURRENT PAPLICATION NUMBER: US/10/188,012 CURRENT PILING DATE: 2002-07-01 PRIOR FILING DATE: 2001-06-29 PRIOR FILING DATE: 2001-06-29 NUMBER: OF SEQ ID NOS: 36 SOFTWARE: PRACES FALESCO FOR Windows Version 4.0
Sequence 17, Application US/10188012
Publication No. US20030124114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (1)...(359)
; OTHER INFORMATION: TIM-1, allele 2
US-10-188-012-19
                                                                    APPLICANT: McIntire, Jennifer Jones APPLICANT: Umetsu, Dale T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: VARIANT
LOCATION: (1)...(360)
OTHER INFORMATION: TIM-1 allele 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100.0
Matches 52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 359
TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
US-10-188-012-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-188-012-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
ô
APPLICANT: Mack, David H.
APPLICANT: Matery, Stichard H.
APPLICANT: Mateon, Suean R.
APPLICANT: Watson, Suean R.
APPLICANT: Escentionology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, CURRENT APPLICATION Whethods of Screening for Modulators of Cancer FILE REFERENCE: 016501-01250003
CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT APPLICATION NUMBER: US 09/663,733
PRIOR PILING DATE: 2000-09-15
PRIOR PLING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR PLING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR PLING DATE: 2001-11-21
PRIOR PLING DATE: 2001-11-21
PRIOR PPLING DATE: 2001-11-21
PRIOR PLING DATE: 2002-01-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 64, Application US/10188832
Publication No. US20040076955A1
GENERAL INFORMATION:
APPLICANT: Mack, David H.
APPLICANT: Aziz, Natasha
APPLICANT: Bos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Bladder Cancer, Compositions
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
CURRENT APPLICATION NUMBER: US/10/188,832
CURRENT FILING DATE: 2002-11-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 275; DB 15;
100.0%; Pred. No. 4.6e-28;
tive 0; Mismatches 0;
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249 PLYSTTTDGNDTVTESSDGLMNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                   APPLICANT: Rosemaric DeKruyff
APPLICANT: Gordon Freeman
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: IMMONE DISEASE
FILE REFERENCE: STAN-235CTP
CURRENT APPLICATION NUMBER: US/10/663,497
CURRENT FILING DATE: 2003-09-15
PRIOR PLING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: 10/188,012
PRIOR PILING DATE: 2002-07-01
SOFTWARE: FASCIE NOS: 40
SOFTWARE: FASCIE OF Windows Version 4.0
SEQ ID NO 17
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFURENTIALOW:

APPLICANT: BOSEMATIE DEKTUYÍF

APPLICANT: ROSEMATIE DEKTUYÍF

APPLICANT: GOTGON FREGULATORY

TITLE OF INVENTION: T CELL REGULATORY

TITLE OF INVENTION: T CELL REGULATORY

TITLE OF INVENTION: IMMUNE DISEASE

FILE REFERENCE: STAN-235GTP

CURRENT APPLICATION NUMBER: US/10/663,497

CURRENT PILING DATE: 2003-09-15

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

NUMBER OF SEQ ID NOS: 40

SOFTWARE: FASELSEQ FOR Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
100.0%; Score 275; DB 17; Length 359;
Best Local Similarity 100.0%; Pred. No. 4.6e-28;
Matches 52; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 275; DB 17;
Best Local Similarity 100.0%; Pred. No. 4.6e-28;
Matches 52; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: VARIANT
CATTON: (1)...(359)
OCHER INFORMATION: TIM-1, allele 2
US-10-663-497-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-663-497-19
's Sequence 19, Application US/10663497
'publication No. US20050095593A1
'GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , NAME/KEY: VARIANT
; LOCATION: (1)...(360)
; OTHER INFORMATION: TIM-1 allele 1
US-10-663-497-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Gol, Chean Eng;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Rieger, Daniel K.;
APPLICANT: Rieger, Daniel K.;
APPLICANT: Starling, Gary;
APPLICANTON: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD;
FILE REFRENCE: 21402-048
CURRENT PILING DATE: 2003-03-19
PRIOR APPLICATION NUMBER: 60/365,491
PRIOR APPLICATION NUMBER: 60/410,618
PRIOR APPLICATION NUMBER: 60/410,618
PRIOR FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CuraSeqList version 0.1
SEQ ID NOS: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGTYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 4.6e-28;
Matches 52; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 275; DB 17; Length 359; 100.0%; Pred. No. 4.6e-28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
PRIOR APPLICATION NUMBER: US 60/302,814
PRIOR FILING DATE: 2001-07-03
PRIOR PILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-10-08
PRIOR PILING DATE: 2001-11-08
PRIOR FILING DATE: 2001-11-08
PRIOR FILING DATE: 2001-11-08
PRIOR FILING DATE: 2001-11-13
PRIOR PPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2002-04-12
NUMBER OF SEQ ID NOS: 207
SEQ ID NO 64
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/10391939A
Publication No. US20050014687A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Giot, Loic;
Guo, Xiaojia Sasha;
Lepley, Denise M.;
Mesri, Mehdi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Anderson, David W.; APPLICANT: Giot, Loic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 100.
Matches 52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-391-939A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-391-939A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
```

ö

ö

249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300

US-10-663-497-17
; Sequence 17, Application US/10663497
; Publication No. US20050095593A1
; GENERAL INFORMATION:

ò

```
0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      254 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-1V-003-497-45

Sequence 25, Application US/10663497

Publication No. US20050095593A1

GENERAL INFORMATION:

APPLICANT: Delle Umetsu

APPLICANT: Delle Umetsu

APPLICANT: Generatic Dekruyff

TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH

TITLE OF INVENTION: I MMUNE DISEASE

TITLE OF INVENTION: MUNBER: US/10/663,497

CURRENT FILING DATE: 2003-09-15

PRIOR APPLICATION NUMBER: 60/302,344

PRIOR FILING DATE: 2001-06-29

PRIOR PELING DATE: 2001-09-16

PRIOR FILING DATE: 2002-07-01

SOFTWARE: FREESE OF WINDOWS VERSION 4.0

SEQ ID NO 25

LENGTH: 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 275; DB 14; Length 364; Best Local Similarity 100.0%; Pred. No. 4.6e-28; Matches 52; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 364;
                                                                       APPLICANT: TURE 1, Dale T.
APPLICANT: Tunction, Dale T.
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Textofroo, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT APPLICATION NUMBER: 60/302,344
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
SOFTWARE: FastSEQ for Windows Version 4.0
IENGTH: 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 275; DB 17; Best Local Similarity 100.0%; Pred. No. 4.6e-28; Matches 52; Conservative 0; Mismatches 0;
                                                          APPLICANT: McIntire, Jennifer Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (1)...(364)
; OTHER INFORMATION: TIM-1 allele 5
US-10-188-012-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; LCCATION: (1)...(364)
; OTHER INFORMATION: TIM-1 allele 5
US-10-663-497-25
Publication No. US20030124114A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-663-497-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Howes, Steve
TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
TITLE OF INVENTION: 031896-026000 (AM101264)
CURRENT APPLICATION NUMBER: US/10/847,918
CURRENT FILING DATE: 2004-05-19
PRIOR FILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 275; DB 17; Length 359; Best Local Similarity 100.0%; Pred. No. 4.6e-28; Matches 52; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 275; DB 17; Length 359; Best Local Similarity 100.0%; Pred. No. 4.6e-28; Matches 52; Conservative 0; Mismatches 0; Indels 0
                                     Sequence 8, Application US/10718321
; GENERAL INFORMATION:
; GENERAL INFORMATION:
; APPLICANT: Bailly, Veronique
; TITLE OF INVENTION: Molecule and Methods for Inhibiting
; TITLE OF INVENTION: Molecule and Methods for Inhibiting
; TITLE OF INVENTION: Shedding of KIM-1
; FILE REFERENCE: A124 US
; CURRENT APPLICATION NUMBER: US/10/718,321
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/295449
; PRIOR PLICATION NUMBER: 60/295449
; PRIOR PLICATION NUMBER: E07/1402
; PRIOR PLICATION NUMBER: E07/1502/17402
; PRIOR FILING DATE: 2002-05-31
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENTYH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 25, Application US/10847918; Publication No. US20050119210A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 25, Application US/10188012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , ORGANISM: Homo Sapiens
US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-10-847-918-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-847-918-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-10-188-012-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 25
```

TYPE: PRT

ð g

ö

ö

TYPE: PRT

ઠે g

Search completed: June 29, 2005, 09:33:02 Job time: 33.5894 secs

Sequence 45, Appl Sequence 15, Appl Sequence 10, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl Sequence 41678, A Sequence 41678, A Sequence 21, Appl Sequence 22, Appl Sequence 23, Appl Sequence 22, Appl Sequence 22, Appl Sequence 26,
Sequence 195346,

Sequence Sequence (Sequence

Title: Perfect score:

Run on:

Sequence:

Scoring table:

Searched:

Database

```
US-10-718-321-1

Sequence 1, Application US/10718321

Sequence 1, Application US/10718321

Sequence 1, Application WS/10718321

Sequence 1, Application Wo. US20050112117A1

GENERAL INFORMATION:

APPLICANT: Bailly, Veronique

APPLICANT: Bailly, Veronique

APPLICANT: Bailly, Veronique

APPLICANT: Bailly, Veronique

APPLICANT: The General Hospital Corporation

TITLE OF INVENTION: Shedding of KIM-1

FILE REFERENCE: A124 US

FILE REFERENCE: A124 US

CURRENT APPLICATION NUMBER: US/10/718,321

CURRENT FILING DATE: 2001-06-01

PRIOR APPLICATION NUMBER: 60/295907

PRIOR APPLICATION NUMBER: PG/295907

PRIOR APPLICATION NUMBER: PG/295907

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2001-06-04

PRIOR PLING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 8

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH. 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
5.7%; Score 99; DB 17; Length 18;
Best Local Similarity 100.0%; Pred. No. 2.5;
Matches 18; Conservative 0; Mismatches 0; Indels
7 US-10-935-254-45
6 US-10-625-1934-10
10.2.10-625-1934-10
10.2.10-327-598-40
10.2.10-327-598-40
10.2.10-327-598-40
10.2.10-327-598-40
10.2.10-425-115-35293
10.2.10-425-115-35293
10.2.10-434-269-22
10.2.10-434-269-22
10.2.10-434-269-22
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288406
10.2.10-428-115-288694
10.2.10-428-662-109
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
10.2.10-428-115-1288694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264 SSDGLWNNNQTQLFLEHS
     TYPE: PRT
ORGANISM: Homo Sapiens
      US-10-718-321-1
                                                                                                                                                                                                                 62.5
62
62
                                                                                                                                                 61.5
                                                                                                                                                                                60.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
     ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Appli
Sequence 23, Appl
Sequence 37, Appl
Sequence 21, Appl
Sequence 53, Appl
Sequence 44813, A
Sequence 88, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appli
Sequence 5, Appli
                                                                                                             June 29, 2005, 09:46:27; Search time 202.106 Seconds (without alignments) 635.503 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                              US-10-718-321-7
1749
1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cgn2_6/ptodata1/pubpaa/US07_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US07_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US07_NEW_PUB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US06_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US07_NEW_PUB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US07_NEW_PUB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US08_NEW_PUB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/USS0B_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/USS0B_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/USS0B_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/USS0B_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/pubpaa/USS0B_PUBCOMB.ppp:*
                  5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-718-321-1

US-10-434-269-23

. US-10-057-783A-37

. US-10-805-177-87

. US-10-434-269-21

. US-10-228-063-53

US-09-864-761-44813

. US-10-805-177-92

. US-09-916-494A-24

. US-09-916-494A-24
                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                 1717557 seqs, 384547976 residues
                  GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Applications_AA:*
                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7115
7115
7115
710
710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published
                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0 Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match
```

ö

Gaps

ö

99 98 81 75 75 70 70 67 67

26 4 3 3 7 6 11 10 9 8 11 11

Score

Result No.

```
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                            US-10-805-177-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-228-063-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-434-269-21
                                                                                                                                                                                                                                                                                                                           LENGTH: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                         GENERAL INFORMATION:

APPLICANT: ITO, Makoto, et al.

APPLICANT: ITO, Makoto, et al.

TITLE OF INVENTION: A METHOD FOR TARGETING A POLYPEPTIDE ONTO CELLULAR SURFACE FILE REPERENCE: 1422-0588P

CURRENT APPLICATION NUMBER: US/10/434,269

PRIOR PILING DATE: 2003-05-09

NUMBER OF SEQ ID NOS: 27

SOFTWARE: Patentin Ver: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Forster, Anthony C.
TITLE OF INVENTION: Process and compositions for peptide, protein and TITLE OF INVENTION: peptidomimetic synthesis FILE REFERENCE: 1
CURRENT APPLICATION NUMBER: US/10/057, 783A
CURRENT FILING DATE: 2002-01-25
NUMBER OF SEQ ID NOS: 48
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) OTHER INFORMATION: Description of Artificial Sequence: FROM SYNTHETIC; OTHER INFORMATION: DNA
US-10-057-783A-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Indels 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129 VTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTM 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.6%; Score 98; DB 15; Length 35; 59.0%; Pred. No. 6.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        152 TTTTVPTTT-VPTTMSIPTTTTVPTTMTVSTTTSVPTTT 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrrgaprrrgaprrrgaprrrgapr----rrrgaprrr 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.6%; Score 81; DB 15; Best Local Similarity 49.0%; Pred. No. 1.1e+02; Matches 24; Conservative 2; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-057-783A-37; Sequence 37, Application US/10057783A; Publication No. US20040091955A1
                                                                                                   Sequence 23, Application US/10434269
Publication No. US20040053296A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-805-177-87
, Sequence 97, Application US/10805177
; Publication No. US20050084449A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Insect intestial mucin US-10-434-269-23
1 SSDGLWNNNQTQLFLEHS 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Landes, Gregory M.
APPLICANT: Chen, Francine
APPLICANT: Bezabeh, Binyam
APPLICANT: FOLLS, Ian
APPLICANT: TSE, Kam Fai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                     US-10-434-269-23
                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 23
LENGTH: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 41
                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
APPLICANT: Mesri, Mehdi
APPLICANT: Statiling, Gary
APPLICANT: Statiling, Gary
APPLICANT: Statiling, Gary
APPLICANT: Mezes, Peter
APPLICANT: Mazes, Peter
APPLICANT: Khramtsov, Nikolia
TITLE OF INVENTION: ANTHORIES AGAINST T CELL IMMUNOGLOBULIN
TITLE OF INVENTION: ANTHORIES AGAINST T CELL IMMUNOGLOBULIN
TITLE OF INVENTION: ANTHORIES 1054
CURRENT APPLICATION NUMBER: 0.5/10/805,177
CURRENT APPLICATION NUMBER: 60/456,652
PRIOR FILLING DATE: 2003-03-19
RUBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 87
SEQ ID NO 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: 1TO, MAKOLO, et al.

TITLE OF INVENITION: A METHOD FOR TARGETING A POLYPEPTIDE ONTO CELLULAR SURFACE
TITLE OF INVENITION: A METHOD FOR TARGETING A POLYPEPTIDE ONTO CELLULAR SURFACE
TILE OF INVENITION: 1422-0588P
CURRENT APPLICATION NUMBER: US/10/434,269
PRIOR APPLICATION NUMBER: US 10/434,269
PRIOR PILING DATE: 2003-05-09
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 21
LENGTH: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , DB 15; here.
. 2.5e+02; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lanahan, Mike
TITLE OF INVENTION: 821f-processing Plants and Plant Parts
FILE REFERENCE: 109846.317
CURRENT APPLICATION NUMBER: US/10/228,063
CURRENT APPLICATION NUMBER: US/10/228,063
CURRENT FILING DATE: 2002-12-12
CURRENT FILING DATE: 2002-12-12
CURRENT FILING DATE: 405
SOFTWARE: FRAISEQ for Windows Version 4.0
SEQ ID NO 53
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.5%; Score 79; DB 100.0%; Pred. No. 46; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.3%; Score 75; DB Best Local Similarity 60.0%; Pred. No. 2.56 Matches 15; Conservative 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 174 PTTMTVSTTTSVPTTTSIPTTSVP 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 Prprsnsrprsrprsrsrsrsrs 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21, Application US/10434269
Publication No. US20040053296A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 53, Application US/10228063
Publication No. US20030135885A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              209 PMPLPRQNHEPVAT 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 PMPLPRONHEPVAT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Rattus norvegicus US-10-434-269-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 14; Conservative
```

δ

```
Sequence 80, Application US/10805177
; Publication No. US20050084449A1
; Publication No. US20050084449A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Francine
; APPLICANT: Bezabeh, Binyam
; APPLICANT: Tee, Kam Fai
; APPLICANT: Tee, Kam Fai
; APPLICANT: Geffers, Michael
; APPLICANT: Gersi, Mehdi
; APPLICANT: Massi, Mehdi
; APPLICANT: Massi, Peter
; APPLICANT: Khramtsov, Nikolia
; TITLE OF INVENTION: ANTIBODIES AGAINST T CELL IMMUNOGLOBULIN
; TITLE OF INVENTION: DOMAIN AND MUCIN DOMAIN 1 (TIM-1) ANTIGEN AND USES THEREOF
; FILE REFERENCE: ABXCUR. 006A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Landes, Gregory M.
APPLICANT: Chen, Francine
APPLICANT: Chen, Francine
APPLICANT: Bezabeh, Binyam
APPLICANT: Foltz, Ian
APPLICANT: Tse, Kam Fai
APPLICANT: Tse, Kam Fai
APPLICANT: Mezes, Peter
APPLICANT: Mezes, Peter
APPLICANT: Khramtsov, Nikolia
APPLICANT: Khramtsov, Nikolia
APPLICANT: Khramtsov, Nikolia
APPLICANT: Khramtsov, Nikolia
APPLICANT: Title OF INVENTION: ANTIBODIES AGAINST T CELL IMMUNOGLOBULIN
TITLE OF INVENTION: DOMAIN AND MUCIN DOMAIN 1 (TIM-1) ANTIGEN AND USES THEREOF
FILE REFERENCE: ABXCUR.006A
                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                             ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                        159 TTVPTTMSIPTTTVPTTMTVSTTT-SVPTTTSIPTTTSVPVTTTVS 204
                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.0%; Score 70.5; DB 9; Length 43; Best Local Similarity 38.3%; Pred. No. 6.4e+02; Matches 18; Conservative 12; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 12;
   IN BRAIN, SIGNAL = 0.96
IN LUNG, SIGNAL = 1
IN PLACENTA, SIGNAL = 0.95
IN FETAL LIVER, SIGNAL = 0.91
IN BONE MARROW, SIGNAL = 0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 17; Le
1.6e+02;
thes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.0%; Score 70; DB
100.0%; Pred. No. 1.6
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 88
LENGTH: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/805,177
CURRENT FILING DATE: 2004-03-19
PRIOR APPLICATION NUMBER: 60/456,652
PRIOR FILING DATE: 2003-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 92, Application US/10805177 Publication No. US20050084449A1 GENERAL INFORMATION:
   ) OTHER INFORMATION: EXPRESSED
) OTHER INFORMATION: EXPRESSED
) OTHER INFORMATION: EXPRESSED
) OTHER INFORMATION: EXPRESSED
) OTHER INFORMATION: EXPRESSED
US-09-864-761-44813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              209 PMPLPRQNHEPV 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PMPLPRONHEPV 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-805-177-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-805-177-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-805-177-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 44813, Application US/09864761

Sequence 44813, Application US/09864761

GENERAL INFORMATION FERM: SIRTING G.

APPLICANT FERM: SIRTING G.

APPLICANT FERM: SIRTING G.

APPLICANT FERM: SIRTING G.

APPLICANT FERM: SIRTING G.

TITLE OF INVERTION HAND GENERAL US/09/664,761

CURRENT PARTICATION WHERE: US 60/120,456

PRIOR PELICATION WHERE: PET/US01/0066

PRIOR PELICATION WHERE: US 60/120,4066

PRIOR PELICATION WHERE: PET/US01/0066

PRIOR PET/US01/00
                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                 ;
0
                                                                                                                                               Query Match 4.2%; Score 73; DB 14; Length 45; Best Local Similarity 45.0%; Pred. No. 4.5e+02; Matches 18; Conservative 6; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: MAP TO AC009549.3
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.83
                                                                                                                                                                                                                                                                   158 TITVPITMSIPTITVPITMTVSTTTSVPTTTSIPTTSV 197
                                                                                                                                                                                                                                                                                                            6 TITATITIGSGGVISTSKITITIASKISITITSSTSCTIPIAV 45
ORGANISM: Artificial Sequence
                            ) FEATURE:
) OTHER INFORMATION: synthetic
US-10-228-063-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-09-864-761-44813
                                                                                                                                                                                                                                                                                                                           g
```

```
Sequence 354965, Application US/10425115
Sequence 354965, Application US/10425115
Sublication No. US20040214272A1
GENERAL INFORMATION:
APPLICANT: La Royalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Can, Yihua
APPLICANT: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants
TITLE OF INVENTION: Plants
CURRENT APPLICATION NUMBER: US/10/425,115
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 369326
SEQ ID NO 354965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                   7
                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 45, Application US/10935254
Publication No. US20050054752A1
GENERAL INFORMATION:
APPLICANT: OBrien, John P
APPLICANT: Yang, Jianlun P
TITLE OF INVENTION: Peptide-Based Diblock and Triblock Dispersants
FILE REPERENCE: CL2252 US NA
CURRENT APPLICATION NUMBER: US/10/935,254
CURRENT FILING DATE: 2004-09-07
NUMBER OF SEQ ID NOS: 122
SOFTWARE: PatentIn version 3.2
SEQ ID NO 45
LENGTH: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 17; Length 37;
                                                                                                                                                                                   Score 67; DB 17; Length 38; Pred. No. 9.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.7%; Score 65; DB 16; Length 47
Best Local Similarity 44.2%; Pred. No. 1.7e+03;
Matches 19; Conservative 5; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          147 STIVPITITVPITIVPITIMSIPTITIVPIT-----MIVSTIT 183
                                                                                                                                                                                                                                                                                162 PITMSIPTTTVPITMTVSTTTSVPTTTSIPTTTSVPVTT 201
                                                                                                                                                                                                                                                                                                            4 PIKGAIPINIAIPI----KSAIAIPIRPSVPINI--PINI 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            146 TSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVSTTT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 TSTSKASTTTTSSKTT-TTSKTSKTTTTSKTSKSST 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Clone ID: MRT4577_86899C.1.pep
US-10-425-115-354965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.8%; Score 66.5; DB 1
47.4%; Pred. No. 1e+03;
tive 6; Mismatches 1
                                                                                                                                                                                                                                     4; Mismatches
                                                                                                 TYPE: PRT ORGANISM: Clostridium thermocellum
    NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin version 3.1
SEQ ID NO 5
LENGTH: 38
                                                                                                                                                                                        3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 18; Conservative
                                                                                                                                                                                                                                     Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Aspergillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
US-10-425-115-354965
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
US-10-935-254-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-935-254-45
                                                                                                                                             US-10-933-404-5
                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/10933404
Publication No. US20050118729A1
GENERAL INCORMATION:
GENERAL INCORMATION:
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION UNMERS: US/10/933,404
CURRENT APPLICATION NUMBER: US/10/933,404
CURRENT FILING DATE: 2004-09-03
PRIOR APPLICATION NUMBER: US/10/933,00177
PRIOR PILING DATE: 2003-03-06
PRIOR FILING DATE: 2003-03-06
PRIOR FILING DATE: 2003-03-07
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 24, Application US/09916494A
Patent No. US20020164774A1
GENERAL INFORMATION:
APPLICANT: Clarkson, Kathleen A.
APPLICANT: Ward, Michael
APPLICANT: Larenas, Edund
TITLE OF INVENTION: Method and Compositions for Treating
TITLE OF INVENTION: Earlyne Containing Fabrics Using Truncated Cellulase
TITLE OF INVENTION: Earlyne Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                Query Match 3.8%; Score 67; DB 17; Length 12; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PITITVPITITVPITIMSIPITITVPITIMTVSTITSVPITIS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 67; DB 9
Pred. No. 8.6e+
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/916,494A
CURRENT FILING DATE: 2000-06-14
FRIOR APPLICATION NUMBER: US 08/382,452
FRIOR FILING DATE: 1995-02-01
FRIOR PRIOR DATE: 1995-02-01
FRIOR FILING DATE: 1993-12-17
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 34
CURRENT APPLICATION NUMBER: US/10/805,177
CURRENT FILING DATE: 2004-03-19
PRIOR APPLICATION NUMBER: 60/456,652
PRIOR FILING DATE: 2003-03-19
NUMBER OF SEQ ID NOS: 141
SOFTWARE: PattSEQ for Windows Version 4.0
SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , ORGANISM: Trichoderma longibrachiatum
US-09-916-494A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 47.5%;
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                            211 PLPRQNHEPVAT 222
                                                                                                                                                                                                                                                                                                                                                                                                                       PLPRONHEPVAT 12
                                                                                                                                                                LENGTH: 12
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
US-09-916-494A-24
                                                                                                                                                                                                                                     US-10-805-177-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-933-404-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151
                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
```

```
Sequence 400, Application US/10327598

Publication No. US20040181039A1

GENERAL INPORMATION:

APPLICANT: Krah. Eugene

APPLICANT: Alyappa, Ashok

APPLICANT: Lawton, Robert

TITLE OF INVENTION: Canine Immunoglobulin Variable Domains, Caninized Antibodies, and

TITLE OF INVENTION: For Making and Using Them

FILE REFERENCE: 01-799-A

CURRENT APPLICATION NUMBER: US/10/327,598

CURRENT FILING DATE: 2001-12-20

PRIOR PILING DATE: 2001-12-21

NUMBER OF SEQ ID NOS: 1139

SOFTWARE: Patentin version 3.0

SEQ ID NO 400

LENGTH: 32

TYPE: PRT

YPPE: PRT

ORGANISM: canis familiaris;
                                                                                                                                                                 Sequence 10, Application US/10622893A
| Publication No. US20050014935A1
| GENERAL INPORMATION:
| APPLICANT: Datta, Abhijit
| APPLICANT: Wang, Yuning
| TITLE OF INVENTION: METHEMINATION OF GLYCATED PROTEINS
| TITLE OF INVENTION: DETERMINATION OF GLYCATED PROTEINS
| TITLE OF INVENTION NUMBER: US/10/622,893A
| CURRENT FILING DATE: 2003-07-17
| NUMBER OF SEQ ID NOS: 23
| SOOTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 10
| LENGTH: 39
| TYPE: PRT
| OGGANISM: Artificial Sequence
| FRATURE:
| FRATURE:
| FRATURE:
| OTHER INFORMATION: Sequence homology between the N-terminal sequence of Amadoriase IUS-10-622-893A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.7%; Score 64; DB 17; Length 39; Best Local Similarity 61.5%; Pred. No. 1.6e+03; Matches 16; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.6%; Score 63; DB 16; Length 32; Best Local Similarity 48.0%; Pred. No. 1.5e+03; Matches 12; Conservative 2; Mismatches 11; Indels
STTGPSETTTSPTTALTTMSRP--TSMPLTWQGKSYITISKFT 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       146 TSTTVPTTTVPTTTVPTTMSIPTTT 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 rsrrrrrrrrrrrrrrrr 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81 GDLSRRDVSLTIENTAVSDSGVYCC 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 GSGSGTDCTLTISRVEADDAGVYCC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search completed: June 29, 2005, 10:14:19
Job time: 202.106 secs
                                                                                                                                                     US-10-622-893A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
US-10-327-598-400
                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

THIS REPORT OF THE PARTY OF THE

```
TYPE: PRT ORGANISM: Leishmania
   US-09-060-767B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-060-767B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 2
US-09-060-767B-8
 LENGTH: 41
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Applii
Ap
                                                                                                                    June 29, 2005, 09:33:11; Search time 60.3694 Seconds (without alignments) 413.004 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Ar
Sequence 8, Ar
Sequence 23, A
Sequence 24, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 39,
Sequence 7, A
Sequence 2, A
                                                                                                                                                                                                                               1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence ·19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12
Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3
Sequence 2
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1
Sequence 1
Sequence 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

(cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-060-767B-8
US-09-060-767B-8
US-09-160-767B-8
US-08-169-944B-24
US-08-169-948B-24
US-08-169-948B-24
US-08-169-948B-24
US-08-169-948-24
US-08-169-948-24
US-08-169-948-29
US-08-169-169-29
US-08-169-29
                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                         513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                    OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                     Gapop 10.0 , Gapext 0.5
                GenCore (c) 1993
                                                                                                                                                                                             US-10-718-321-7
1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                 Copyright
                                                                                                                                                                                                                                                                                                                                                                                                seq length: 0
seq length: 50
                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĸiĸiaiaiwiwiwiwiiiiiii
                                                                                                                                                                                                                Perfect score:
                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB
Maximum DB
                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
```

```
Sequence 5, Application US/09060767B

Patent No. 6720152

GENERAL INFORMATION:

APPLICANT: Weil, Gary

APPLICANT: Chandrashekar, Ramaswamy

TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for TITLE OF INVENTION: H. capsulatum

FILE REPERENCE: BJCH 9986

CURRENT APPLICATION NUMBER: US/09/060,767B

CURRENT FILING DATE: 1998-04-15

NUMBER OF SEQ ID NOS: 9

SOFTWARE: PatentIn version 3.0

SEQ ID NO 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:

APPLICANT: Weil, Gary
APPLICANT: Chandrashekar, Ramaswamy
APPLICANT: Chandrashekar, Ramaswamy
TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for
TITLE OF INVENTION: H. capsulatum
FILE REPREBURE: BJCH 9886
CURRENT APPLICATION NUMBER: US/09/060,767B
CURRENT FILING DATE: 1998-04-15
FRICH APPLICATION NUMBER: 60/043,332
FRICH APPLICATION NUMBER: 60/043,332
FRICH FILING DATE: 1997-04-15
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.0
SOFTWARE: PATENTIAL TAREATER APPLICATION NUMBER: PATENTH APPLICATION NUMBER OF SEQ ID NOS: 9
SOFTWARE: PATENTH APPLICATION NUMBER OF SEQ ID NOS: 9
SOFTWARE: PATENTH APPLICATION NUMBER OF SEQ ID NOS: 9
STATEMENT APPLICATION NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                щ
.
                                                                                                                                                                                                                                                             35364, A
50581, A
9, Appli
                                                                                                                                                                                                                                                                                                                                                                        2, Appli
2, Appli
2, Appli
132, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     151 PTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSVP 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 103; DB 4; Length 41
Pred. No. 0.095;
3; Mismatches 10; Indels
US-08-169-948B-20
US-08-448-873-20
US-08-318-452D-20
US-09-916-494A-20
US-09-461-325-425
US-10-115-123-425
US-10-115-123-425
US-09-270-767-35364
US-09-270-767-35364
US-09-270-767-35364
US-09-223-043-9
US-09-933-870A-2
US-09-593-870A-2
US-08-137-117D-132
US-08-137-117D-132
US-08-956-317-132
US-09-93-37A-13
US-09-93-17-132
US-09-93-37A-13
US-09-93-37A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8, Application US/09060767B Patent No. 6720152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.9%;
Best Local Similarity 56.2%;
Matches 27; Conservative 3
```

```
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: South STATE: CA COUNTRY: USP ZIP: 94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-448-873-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-448-873-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24, Application US/08169948B
Fatent No. 5861271
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Fowler, Timothy
APPLICANT: Clarkson, Kathleen
APPLICANT: Clarkson, Kathleen
APPLICANT: Larenas, Edmund
TITLE OF INVENTION: For Their Expression
TITLE OF INVENTION: For Their Expression
NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genenor International
STREET: 180 Kimball Way
CITT: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                             151 PTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSVPVTTTV 203
                                                                                                                                                                                                         15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Description of Artificial Sequence: single; OTHER INFORMATION: stranded linear peptide US-09-043-731-23
                                                                                DB 4; Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
4.0%; Score 70.5; DB 3; Length 29;
Best Local Similarity 57.1%; Pred. No. 29;
Matches 16; Conservative 2; Mismatches 9; Indels
                                                                           Query Match 4.9%; Score 86.5; DB 4; Length 41 Best Local Similarity 35.8%; Pred. No. 2.1; Matches 19; Conservative 8; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                   US-09-043-731-23

US-09-063-731-23

Sequence 23, Application US/09043731A

Patent No. 6344203

GENERAL HYPORMATION:

APPLICANT: The Austin Research Institute

TITLE OF INVENTION: Mimicking Peptides in Cancer Therapy
FILLE REFERENCE: CALA-200

CURRENT APPLICATION NUMBER: US/09/043,731A

CURRENT FILLING DATE: 1998-06-23

NUMBER OF SEQ ID NOS: 26

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 23

LENGTH: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BATEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: DEC 17 1993
FLING DATE: DEC 17 1993
ATTORNEY/AGENT INFORMATION:
NAME: HOEN, MATGATER A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               168 PITITVPTIMIVSTITSVPTITSIPITI 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 PTTTPISTT-TMVTPTPTGTQTPTTT 29
; ORGANISM: Histoplasma Capsulatum
US-09-060-767B-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
;
;
                                                                                                                                                                                                                                                                                                                                                                                    7
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Fowler, Timothy
APPLICANT: Ward, Michael
APPLICANT: Clarkson, Kathleen
APPLICANT: Clarkson, Katherine A.
APPLICANT: Clarkson, Katherine A.
APPLICANT: Larenae, Edmund
TITLE OF INVENTION: No. 5874276el Cellulase Enzymes and Systems
TITLE OF INVENTION: For Their Expressions
NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSE: Genencor International
STREET: 180 Kimball way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 9
                                                                                                                                                                                                                                                                                                                                                                                    . 9
                                                                                                                                                                                                                                                                                                                               Query Match 3.8%; Score 67; DB 2; Length 34; Best Local Similarity 47.5%; Pred. No. 68; Matches 19; Conservative 5; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PGATTITTSTRPP--SGPTTTTRAT----STSSSTPPTSS 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Patentin PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/448,873
                                                                                                                                                                                                                                                                                                                                                                                                                                        151 PTTTTVPTTTVPTTMSIPTTTVPTTMTVSTTTSVPTTTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.8%; Score 67; DB 3.8 Local Similarity 47.5%; Pred. No. 68; Matches 19; Conservative 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Stone, Christopher L. REGISTRATION NUMBER: 35,696
REFERENCE/DOCKET NUMBER: GC226D14
TELECOMMUNICATION INFORMATION:
REGISTRATION NUMBER: 33,401
REFERENCE/DOCKET NUMBER: GC226
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 742-7536
TELEFAX: (415) 742-7217
INPORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 34 amino acids
TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-169-948B-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/169,948
FILING DATE: 17-DEC-1993
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24, Application US/08448873; Patent No. 5874276; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (415) 742-7555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (415)742-7217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 34 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
```

ઠે 셤

```
GENERAL INFORMATION:
APPLICANT: Fowler, Timothy
APPLICANT: Clarkson, Kathleen A.
APPLICANT: Clarkson, Kathleen A.
APPLICANT: Collier, Kathleen B.
APPLICANT: Larenas, Edmund
TITLE OF INVENTION: Method and Compositions for Treating
TITLE OF INVENTION: Enzyme Compositions
TITLE OF INVENTION: Enzyme Compositions
FILE REPREBNCE: 6C226-C4
CURRENT APPLICATION NUMBER: US/09/916,494A
CURRENT FILING DATE: 2000-06-14
FRICR APPLICATION NUMBER: US 08/382,452
FRICR FILING DATE: 1995-02-01
FRICR PELICATION DATE: 1993-12-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 3.8%; Score 67; DB 4; Length 34; Best Local Similarity 47.5%; Pred. No. 68; Matches 19; Conservative 5; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.8%; Score 67; DB 4; Length 34; Best Local Similarity 47.5%; Pred. No. 68; Matches 19; Conservative 5; Mismatches 10; Indels
                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                151 PITITVPITIVPITMSIPTITIVPITMTVSTITSVPITIS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 PGATTITTSTRPP--SGPTTTTRAT----STSSSTPPTSS 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151 PITITVPTITVPTIMSIPTITIVPTIMIVSTITSVPTITS
                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/507,362A
FILING DATE: 27-0Ct-1995
CLASSIFICATION: Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Caetaneda, Janet
REGISTRATION NUMBER: 33,228
REFERENCE/DOCKET NUMBER: GC226-3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-08-507-362A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 24
LENGTH: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Trichoderma longibrachiatum
  STREET: 925 Page Mill Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24, Application US/09916494A Patent No. 6620605
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (650) 846-4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _
_
_
_
_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (650)845-6504
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 34 amino acids
                                                                                            ZIP: 94304
COMPUTER READABLE FORM:
                         CITY: Palo Alto
                                                                        USA
                                                    STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
US-09-916-494A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-916-494A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collier, Katherine
Larenas, Edmund
TITLE OF INVENTION: An Brzyme Feed Additive and Animal Feed Including It
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.8%; Score 67; DB 3; Length 34; 47.5%; Pred. No. 68;
                                                                                                                                                                                                                                   APPLICANT: Fowler, Timothy
APPLICANT: Clarkson, Kathleen A.
APPLICANT: Ward, Michael
APPLICANT: Ward, Michael
APPLICANT: Collier, Katherine D.
APPLICANT: Collier, Katherine D.
TITLE OF INVENTION: NOVEL CELLUIOSE ENZYMES AND SYSTEMS
TITLE OF INVENTION: FOR THEIR EXPRESSION
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genencor International
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Indels
151 PTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151 PTTTTVPTTTVPTTMSIPTTTVPTTMTVSTTTSVPTTTS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER TREADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: Floppy disk
COMPUTER: Floppy disk
COMPUTER: Parent Floppy disk
COPERATIOG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/382,452D
FILING DATE: February 1, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Christopher: L. Stone
REGISTRATION NUMBER: 36,696
REFERENCE/DOCKET NUMBER: 36,696
                         1 PGATTITISTRPP--SGPTTTTRAT----STSSSTPPTSS 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Genencor International
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MS-08-01,

Sequence 12, Application US/08507362A

Sequence 12, Application US/08507362A

GENERAL INFORMATION:

MORGAN, AMGREW

Powler, Timothy

Ward, Michael

Clarkson, Kathleen
                                                                                                                                                        Sequence 24, Application US/08382452D
Patent No. 6268196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 925 Page Mill Road CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (415)742-7217
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (415) 742-7555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 34 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE:
                                                                                                                   RESULT 6
US-08-382-452D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-382-452D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

5

```
US-09-060-767B-4
                                                                                         US-09-060-767B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                            RESULT 11
US-08-288-059-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-288-059-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
SEO ID NO 7
                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INCORNATION:
APPLICANT: Weil, Gary
APPLICANT: Chandrashekar, Ramaswamy
TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for
TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for
TITLE OF INVENTION: H. capsulatum
FILE REPERENCE: DATA 996
CURRENT APPLICATION NUMBER: US/09/060,767B
CURRENT FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/043,332
PRIOR APPLICATION NUMBER: 60/043,332
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.0
                                                                                                                                           GENERAL INFORMATION:

APPLICANT: Anderson, W. French
APPLICANT: Anderson, W. French
APPLICANT: Wu, Bonnie W.

TITLE OF INVENTION: Retroviral Envelopes Having
TITLE OF INVENTION: Modified Hypervariable polyproline Regions
TUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:
ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi, Stewart & Olstein
STREET: Roseland
STRATE: New Jersey
CONNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIP 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

3.8%; Score 67; DB 3; Length 46;
Best Local Similarity 34.0%; Pred. No. 99;
Matches 16; Conservative 10; Mismatches 9; Indels
1 PGATTITTSTRPP--SGPTTTTRAT----STSSSTPPTSS 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OUREATING SYSTEM:
OPERATING SYSTEM:
SOFTWARE: Word 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/856,074A
FILING DATE: 14-May-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Olstein, Elliot M.
REGISTRATION NUMBER: 24,025
REFERENCE/DOCKET NUMBER: 271010-378
TELECOMUNICATION INFORMATION:
TELEPHONE: 973-994-1700
                                                                                                               . Sequence 39, Application US/08856074A
; Patent No. 6004798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch diskette
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7, Application US/09060767B Patent No. 6720152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 973-994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 46 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          07068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-856-074A-39
                                                                                         US-08-856-074A-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
US-09-060-767B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08288059;
Patent No. 5827666;
GENERAL INFORMATION:
APPLICANT: FINN, OLLVERA J.
APPLICANT: FONY. OLLVERA J.
TITLE OF INVENTION: SYNTHEFIC MULTIPLE TANDEM REPEAT MUCIN
TITLE OF INVENTION: AND MUCIN-LIKE PEPTIDES, AND USES THEREOF
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN DARRY & CUSHMAN, L.L.P.
STREET: 1100 NEW YORK AVENUE, N.W.
CONTY: WASHINGTON
                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.5%; Score 61.5; DB 2; Length 26; 44.1%; Pred. No. 1.4e+02; tive 1; Mismatches 9; Indels
                                                                                                             Query Match 3.7%; Score 64; DB 4; Length 25; Best Local Similarity 48.5%; Pred. No. 81; Matches 16; Conservative 3; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUBER: US/08/288,059
FILING DATE: 08-AUG-1994
CLASSIPICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 TITPIVITVPIVITVRISIIVPITITVPITIVPI 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 riripiri------ririvrpirpipigi 26
                                                                                                                                                                                                         168 PTITIVPTIMIVSTITSVPTT 200
                                                                                                                                                                                                                                                    2 prrrr----rrrrrrrrrrrr 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61137/205204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/09060767B Patent No. 6720152 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARLANA K.
REGISTRATION NUMBER: 35,843
REPRENCE/DOCKET NUMBER: 6113
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
LENGTH: 25
TYPE: PRT
ORGANISM: Histoplasma Capsulatum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20005
```

```
186 PTTTSIPTTTSVPVTTTVSTFVPPMPLP 213
                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Felfe & Lynch
805 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 amino acids
                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 2:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & L)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York City
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10022
                                                                                                                                                                     US-08-597-495B-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-597-495B-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-068-051A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                  RESULT 14
                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                     ò
APPLICANT: Weil, Gary
APPLICANT: Chandrashekar, Ramaswamy
APPLICANT: Chandrashekar, Ramaswamy
TITLE OF INVENTION: Diagnosis of Histoplasmosis Using Antigens Specific for
TITLE OF INVENTION: H. capsulatum
FILE REPERENCE: BUCH 996
CURRENT PAPLICATION NUMBER: US/09/060,767B
CURRENT PAPLICATION NUMBER: 60/043,332
PRIOR APPLICATION NUMBER: 60/043,332
PRIOR FILING DATE: 1997-04-15
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.0
SEQ ID NO 4
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/08530569B
Patent No. 5939526
GENERAL INFORMATION:
APPLICANT: Gaugler, Beatrice
APPLICANT: van den Bynde, Benoit
APPLICANT: Schrier, Peter
APPLICANT: Brouwenstijn, Nathalie
APPLICANT: Brouwenstijn, Nathalie
APPLICANT: Boon-Falleur, Thierry
TITLE OF INVENTION: Laolated RAGE-1 Derived Peptides Which
TITLE OF INVENTION: Complex with HLA-B7 Molecules and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                             Score 60.5; DB 4; Length 25;
Pred. No. 1.6e+02;
1; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Wolf, Greenfield & Sacks, P.C.
STREET: Federal Reserve Plaza, 600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/530,569B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 59; DB 2;
Pred. No. 3.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       151 PTTTTVPTTWPTTMSIPTTTVPT 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L0461/7002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PISTVTPTPT-PIPTPTVTATPT 24
                                                                                                                                                                                                                                                                                                                         ORGANISM: Caldocellum saccharolyticum US-09-060-767B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/ACENT INFORMATION:
NAME: Gates, Edward R.
REGISTRATION NUMBER: 31,616
REFRENCE/DOCKET NUMBER: L0461
TELECOMMUNICATION INFORMATION:
TRLEPHONE: 617-720-3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.4%;
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
3.5%;
Best Local Similarity 52.0%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 42.9
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 617-720-2441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: UK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
US-08-530-569B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-530-569B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

ö

Gaps

ô

5; Mismatches

```
TITLE OF INVENTION: Colon Cell And Colon Cancer Cell
Associated Nucleic Acid Molecules, Protein And Peptides
                                                                                                                                                                                                            GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;

APPLICANT: Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;

APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;

APPLICANT: Heath, Joan K.; White, Sara J.; Johnstone, Cameron

TITLE OF INVENTION: Colon Cell And Colon Cancer Cell

TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 28, Application US/09068051A
Patent No. 6291235
GENERAL INFORMATION:
APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;
Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;
Catimel, B.; Ji, Hong; Burgess, Anthony W.;
Heath, Joan K.; White, Sara J.; Johnstone, Cameron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 59; DB 1;
Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 DTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRV 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 ENRVRVSNDAEKSNASITIDOKTWDDNGTYECSV 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Mismatches
6 PLRRSSPSSNRIRNTSTNNQFVPTMPLP 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/597,495B
FILING DATE: 02-Feb-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/511,876
FILING DATE: 04-Aug-1995
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5712369man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5316
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                  Sequence 28, Application US/08597495B Patent No. 5712369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 29.4%;
Matches 10; Conservative 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
```

```
ADDRESSEE: Fulbright & Jaworski LLP

STREET: 66 Fitth Avenue
CITY: New York City
COUNTRY: USA
CO
```

Search completed: June 29, 2005, 09:49:08 Job time : 61.3694 secs

2 ENRVRVSNDAEKSNASITIDQKTMDDNGTYECSV 35

Ltd.
Compugen
- 2005
(c) 1993
Copyright

mode]
8
using
search,
protein
1
protein
Ö

June 29, 2005, 09:03:05 ; Search time 228.354 Seconds (without alignments) 565.693 Million cell updates/sec Run on:

US-10-718-321-7

Title: Perfect score:

1 MHPQVVILSLILHLADSVAG......PFKKEVQQLRPHKSCIHQRE 334 Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

2105692 segs, 386760381 residues Searched:

938430 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 50

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A_Geneseq_16Dec04:* Database :

geneseqp1980s:* geneseqp1990s:*

geneseqp20028:* geneseqp2003as:* geneseqp2003bs:* geneseqp20048:* geneseqp2000s:* geneseqp2001s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Aao26686 Human KIM	Aao26687 Human KIM		Aao26681 Human KIM	Aao26682 Human KIM	Aaw59911 Amino aci	Aao26683 Human KIM	Aao26685 Human KIM	Aao26684 Human KIM	Aao26688 Human KIM	Abu53167 Human tes	Abu53169 Human tes	Abp96634 Raw-starc	_	Aaw21983 Human MUC	Aaw22257 Muc pep 9	Abb41070 Peptide #	Aam34846 Peptide #	Aam74730 Human bon	Aam61928 Human bra	Abg56513 Human liv		5 Cellul	Aaw88522 Amphotrop	Aao19219 Human sec
	ΩI	AA026686	AA026687	AA026673	AA026681	AA026682	AAW59911	AA026683	AA026685	AA026684	AA026688	ABU53167	ABU53169	ABP96634	AAR72130	AAW21983	AAW22257	ABB41070	AAM34846	AAM74730	AAM61928	ABG56513	ABG44533	ADG14245	AAW88522	AA019219
	DB	9	9	9	9	ø	~	9	9	9	9	4	4	ø	~	2	~	4	4	4	4	4	เว	7	N	ß
	Query Match Length DB	18	18	18	18	18	49	18	18	18	18	39	34	45	38	29	29	43	43	43	43	43	43	38	46	48
	Query	5.8	5.7	5.7	5.6	5.5	5.5	5.5	5.4	5.3	5.1	4.9	4.5	4.2	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.8	3.7
	Score	101	66	66	86	97	96.5	96	95	92	90	86.5	79.5	73	71	70.5	70.5	70.5	70.5	70.5	70.5		70.5	67	67	65
i	Result No.	1	7	m	4	'n	9	7	Φ	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Aao19218 Human sec	Aag10258 Arabidops	Adm08777 Canine im	Adm08560 Canine im	Aam17640 Peptide #	Abb36660 Peptide #	. Aam30158 Peptide #	Abb31447 Peptide #	Abb21997 Protein #	Aam69820 Human bon	Aam57424 Human bra	Abg51510 Human liv	Aam05299 Peptide #	Abg39446 Human pep	Aaw72699 Human muc	Adg14246 Cellulose	Abu53259 Human tes	Aam20331 Peptide #	Abb40865 Peptide #	Aam34632 Peptide #
AA019218	AAG10258	ADM08777	ADM08560	AAM17640	ABB36660	AAM30158	ABB31447	ABB21997	AAM69820	AAM57424	ABG51510	AAM05299	ABG39446	AAW72699	ADG14246	ABU53259	AAM20331	ABB40865	AAM34632
S	m	7	7	4	4	4	4	4	4	4	4	4	S	0	7	4	4	4	4
48	39	32	32	34	34	34	34	34	34	34	34	34	34	56	34	39	20	20	20
3.7	3.7	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4
65	64.5	63	63	62	62	62	62	62	62	62	62	62	62	61.5	61	9	9	9	9
56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

AAO26686 standard; peptide; 18 AA. (first entry) 20-MAR-2003 AA026686

Human KIM-1 mucin domain related peptide, SEQ ID No 14.

Cytostatic, gene therapy, antibody, antigen; antigen-binding, proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.

Synthetic.

WO200298920-A1.

12-DEC-2002.

31-MAY-2002; 2002WO-US017402.

01-JUN-2001; 2001US-0295449P.

(BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP.

Bailly V, Bonventre J;

WPI; 2003-156845/15.

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.

Disclosure; Fig 1A; 42pp; English.

The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal polypeptide. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention

N

Matches

셤

ઠ

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a binding epitope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                        Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury, renal cancer; binding epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 99; DB 6; Length 18;
Pred. No. 1.9;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human KIM-1 mucin domain related peptide, SEQ ID No 9.
                                                                                       Monoclonal antibody binding epitope, SEQ ID No 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAO26681 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 25; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 5.7%; So.
Local Similarity 100.0%; P.
es 18; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                               01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         264 SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                     (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. renal cancer.
                                                                                                                                                                                                                                      WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200298920-A1
                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAR-2003
                                                   20-MAR-2003
                                                                                                                                                                                                                                                                         .2-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA026681;
               AA026673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO26681
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. remal soncer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                              5.8%; Score 101; DB 6; Length 18;
100.0%; Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 18;
                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                              Human KIM-1 mucin domain related peptide, SEQ ID No 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 99; DB 6;
Pred. No. 1.9;
0; Mismatches
                                                   100.0%; Pred. No. 1.4 :ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
AAO26673
ID AAO26673 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure, Fig 1A; 42pp; English.
                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 5.7%; Sco
Best Local Similarity 100.0%; Pr
                                                                                                     255 TDGNDTVTESSDGLWNNN 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264 SSDGLWNNNQTQLFLEHS 281
                                                                                                                             1 TDGNDTVTESSDGLWNN 18
                                                                                                                                                                                                                                      AAO26687 standard; peptide; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSDGLWNNNOTOLFLEHS 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                             (first entry)
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-156845/15.
                                                   Local Similarity
Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200298920-A1
                                                                                                                                                                                                                                                                                                             20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-DEC-2002
                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      >
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                         AA026687;
                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bailly
```

g 8

ö

Gaps

ö

ö

```
The invention relates to a novel antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This is the amino acid sequence of the mutanase enzyme PT box, which decomposes the alpha-1,3 glucoside bond of mutan. The mutanase enzyme is used in the method of the invention for prevention and removal of plaque and bacteria on teeth
   New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                 Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mutanase enzyme; PT box; alpha-1,3 glucoside bond; mutan; plaque; bacteria; teeth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene encoding a mutanase enzyme - used for prevention and removal plaque and bacteria on teeth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 STTVPTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTSVP 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'n.
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 49;
                                                                                                                                                                                                                                                                                                                             Length 18
                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25; Indels
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Amino acid sequence of the mutanase enzyme PT box.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 96.5; DB 2;
Pred. No. 9.4;
1; Mismatches 25;
                                                                                                                                                                                                                                                                                                                           DB 6;
2.7;
                                                                                                                                                                                                                                                                                                                                              100.0%; Pred. No. 2.7 ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                             Score 97;
                                                                                           Disclosure, Fig 1A, 42pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW59911 standard; peptide; 49 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Page 5; 15pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                  219 PVATSPSSPQPAETHPTT 236
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PVATSPSSPOPAETHPTT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97JP-00284362.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96JP-00314057
                                                                                                                                                                                                                                                                                                                             5.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 44.2
hes 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-474495/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (LIOY ) LION CORP.
                                                         e.g. renal cancer
                                                                                                                                                                                                                                                                                          Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 49 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP10201483-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bacillus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Si
Matches 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW59911;
                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW59911
     ####X8X8X8000000XX8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal ancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                  New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy; antibody; antigen; antigen-binding; release; inhibitor; kidney injury molecule-1; KIM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human KIM-1 mucin domain related peptide, SEQ ID No 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 6;
2.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 98; DB 6; Pred. No. 2.3; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.6%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAO26682 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                            Disclosure, Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MPLPRONHEDVATSPSSP 18
                                   31-MAY-2002; 2002WO-US017402
                                                                     01-JUN-2001; 2001US-0295449P
04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210 MPLPRQNHEPVATSPSSP
                                                                                                                         (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.
nes 18; Conservative
                                                                                                                                                                             Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bonventre J;
                                                                                                                                                                                                                   WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                            e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-2003
12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteolytic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-2002.
                                                                                                                                                                               Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA026682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
```

Matches

8 셤

RESULT 5

AA026682

<u>;</u>

```
(BIOJ ) BIOGEN INC
                                                          12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-2002
                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA026684;
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA026684
ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel antibody, antibody derivative or antigen-
binding polypeptide that inhibits proteolytic release of a soluble
kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells.
The antibody, antibody derivative or antigen-binding polypeptide is
useful for treating or preventing renal disease or injury, e.g. renal
cancer. The antibody is also useful for inhibiting shedding of the KIM-1
polypeptide. This sequence represents a human KIM-1 mucin domain related
                                                                                                                                                                                                                                                                                                                                  New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                  Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor; kidney injury molecule-1, KIM-1, renal disease, injury, renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6; Length 18; 3.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                 Human KIM-1 mucin domain related peptide, SEQ ID No 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human KIM-1 mucin domain related peptide, SEQ ID No 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.5%; Score 96;
100.0%; Pred. No.
                                      AAO26683 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 1A; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ż
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.5,
100.0%; Pz.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228 QPAETHPTTLQGAIRREP 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAO26685 standard; peptide; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 OPAETHPTTLOGAIRREP 18
                                                                                                                                                                                                                                         01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                      31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                      (BIOJ ) BIOGEN INC. (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                             (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polypeptide. This sequence peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                   Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                       WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
Les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 AA;
                                                                                                                                                                               WO200298920-A1
                                                                             20-MAR-2003
                                                                                                                                                                                                   12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAR-2003
                                                         AA026683;
                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA026685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
AAO26685
ID AAO2
XX
AC AAO2
XX
DT 20-M
XX
XX
XX
KW Cyto
                            RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 95; DB 6; Length 18;
Pred. No. 3.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human KIM-1 mucin domain related peptide, SEQ ID No 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 1A; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAO26684 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.4%; Sur
100.0%; Pre
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                         31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                  01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            246 TSSPLYSYTTDGNDTVTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TSSPLYSYTTDGNDTVTE
                                                                                                                                                                                                                                                                                                                                                                                                (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                        (BIOJ ) BIOGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200298920-A1
                                                                                                              WO200298920-A1
```

ö

```
ABU53167
 888888888888
                                                                                                                                                                    셤
                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                            ö
                                                                                                                                   The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing real disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related
                                                            New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                      Human KIM-1 mucin domain related peptide, SEQ ID No 16.
                                                                                                                                                                                                                                                      5.3%; Score 92; DB 6;
100.0%; Pred. No. 6.2;
ive 0; Mismatches
                                                                                                                 Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                         AAO26688 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2001; 2001US-0295449P 04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                 237 LOGAIRREPTSSPLYSYT
                                                                                                                                                                                                                                                                                                               LQGAIRREPTSSPLYSYT
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                              peptide of the invention
                    Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bailly V, Bonventre J;
                                        WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-156845/15.
                                                                                            renal cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                renal cancer
                                                                                                                                                                                                                                    Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200298920-A1
                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2003
                    Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                              AAO26688;
                                                                                             e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                e.g.
                                                                                                                                                                                                                                                                                                                                                             AA026688
ID AA02
                                                                                                                                                                                                                                                                                                                                                     RESULT
ઠ
                                                                                                                                                                                                                                                                                                                    셤
```

The invention relates to a novel antibody, antibody derivative or antigen

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel polynuclectides and polypeptides isolated from human cDNA libraries which can be used for gene therapy or in vaccines. The polynuclectides of the invention and antibodies encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The products of the invention may also be used to identify modulators of expression and activity and to down regulate expression and activity. The antibodies of the invention may also be used as diagnostic agents for detecting the presence of polypeptides in samples. This sequence represents a homologue of a polypeptide described in the disclosure of the invention
-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     οŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acids having the sequences of clones isolated from libraries different human tissues, useful in recombinant DNA methodologies.
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ë.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; gene therapy; vaccine; disease treatment; detection.
                                                                                                                                                                                                                                                                                         5.1%; Score 90; DB 6; Length 18;
100.0%; Pred. No. 8.6;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human testes-derived DKFZphtes3_2all homologue #27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  145 RTST-TVPTTTVPTTTVPTTMSIPTTTVPTTMTVSTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 RPSTLTTFTTITLPTT--PTSFTTTTTTTTTTSSTVLSTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 86.5; DB
Pred. No. 38;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example III; Page 776; 1095pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEHU-) GERMAN HUMAN GENOME PROJECT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABU53167 standard; protein; 39 AA.
                                                                                                                                                                                                                                                                                                                                                                                                           273 QTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0149499P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0156503P
                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTOLFLEHSLLTANTIKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 55.0
nes 22; Conservative
                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-327840/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 39 AA;
                                                                                                                                                                                                                                      Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200112659-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wiemann S;
                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

Craig J, Kinkema M;

Chen W,

Batie CJ,

Basu SS,

```
(SYGN ) SYNGENTA PARTICIPATIONS AG.
                                                               27-AUG-2002; 2002WO-US027129.
                                                                                     17-AUG-2001; 2001US-0315281P
                    WO2003018766-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cleavage-site
                                                                                                                                Janahan MB,
                                          06-MAR-2003
 Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR72130
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LI LEX SXXXXXXXXXXXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ï
                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel polymuclectides and polypeptides isolated from human cDNA libraries which can be used for gene therapy or in vaccines. The polymuclectides of the invention and antibodies encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The products of the invention may also be used to identify modulators of expression and activity and to down regulate expression and activity. The antibodies of the invention may also be used as diagnostic agents for detecting the presence of polypeptides in samples. This sequence represents a homologue of a polypeptide described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                          Nucleic acids having the sequences of clones isolated from libraries of different human tissues, useful in recombinant DNA methodologies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Self-processing plant; plant; processing enzyme; alpha-amylase; grain; pullulanase; alpha-glucosidase; glucose isomerase; glucoamylase; mesophilic; thermophilic; hyperthermophilic; transgenic plant; starch; maltodextrin; ethanol; fermentation; beverage; enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Length 34;
                                                                                                                               Human; gene therapy; vaccine; disease treatment; detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 79.5; DB 4; Length 3 Pred. No. 1e+02; 8; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Raw-starch binding site protein sequence SEQ ID NO:53.
                                                                                                           Human testes-derived DKFZphtes3_2a11 homologue #29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PITMSIPTITIVPTIMIVSTITSVPTITSIPTITSV 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example III; Page 776; 1095pp; English.
                                                                                                                                                                                                                                                                           (GEHU-) GERMAN HUMAN GENOME PROJECT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ź
                                           ABU53169 standard; protein; 34 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABP96634 standard; protein; 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.5%;
                                                                                                                                                                                                                      18-AUG-2000; 2000WO-IB001496.
                                                                                                                                                                                                                                           99US-0149499P
99US-0156503P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-JUN-2003 (first entry)
                                                                                     (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 50.0°
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                      WPI; 2001-327840/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 34 AA;
                                                                                                                                                                           WO200112659-A2
                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                           18-AUG-1999;
28-SEP-1999;
                                                                                      14-APR-2003
                                                                                                                                                                                                 22-FEB-2001
                                                                                                                                                                                                                                                                                                  Wiemann S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP96634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ~
                                                                ABU53169
                   RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABU53169
                                          à
```

```
ö
                                                                                                                                                                                                                                                                                                                                               The present invention describes polynucleotides which encode processing enzymes (e.g. alpha-amylase, pullulanase, alpha-glucosidase, glucose isomerase, or glucoamylase) that are optimised for expression in plants. The polynucleotides encode mesophilic, thermophilic or hyperthermophilic processing enzymes, which are activated under suitable conditions to act upon the desired substrate. Also described are self-processing transgenic plants and plant parts, e.g. grain, which express one or more of these enzymes and have an altered composition that facilitates plant and grain processing. Also described is a method (M) for converting starch to starch processing enzyme contained in it. Transgenic grain is useful the starch processing enzyme contained in it. Transgenic grain is useful for preparing maltodextrain. A transformed plant (TP) and be used to produce for having improved taste and to produce fermentable substrates for ethanol and fermented beverages. (M) eliminates the need
                                                                                                           Novel polynucleotide encoding hyperthermophilic processing enzymes e.g. alpha-amylase, useful for producing plant to produce food products having improved taste or fermentable substrates for ethanol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       endoglucinase III; EGIII; binding domain; cellulose; fused protein;
affinity purification molecular tag; factor Xa recognition site;
affinity chromatography; Trichoderma reesei; prevent abnormal folding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to mill or physically disrupt the integrity of plant parts prior to recovery of starch-derived products. The present sequence represents raw-starch binding site, which is given in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2. .34
/note= "Endoglucinase III linker domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            158 TITVPITMSIPITITVPITMTVSTITSVPITISIPITISV 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTATTTGSGGVTSTSKTTTTASKTSTTTSSTSCTTPTAV 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.2%; Score 73; DB 6; 345.0%; Pred. No. 4.2e+02; Live 6; Mismatches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecular tag contg. EGIII linker domain.
                                                                                                                                                                                                                                                                                 Example 25; Page 112; 158pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR72130 standard; protein; 38 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 45.0
Matches 18; Conservative
    2003-268420/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present invention
WPI; 2003-268420/
N-PSDB; ACC44576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 45 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR72130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
```

```
Cancer; vaccine; peptide mimic; mucin; MUC2; Gal alpha(1,3)Gal;
immunotherapy; therapy; adenocarcinoma; VNTR;
variable number of tandem repeat.
                                                                                                                                                                                                  1 pgarrirrsrrpp--sgprrrrrar---srsssrpprssi 35
                                                                                                                                                                                                                           AAW21983 standard; peptide; 29 AA
                                                                                                                                                                                                                                                        Human MUC2 VNTR peptide Muc pep9.
                                                                                                                                                                                                                                              30-OCT-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                      (AUST-) AUSTIN RES INST
                                                                                                                                                                                                                                                                                               WO9711715-A1
                                                                                                                                                                                                                                                                                                                   27-SEP-1996;
                                                                                                                                                                                                                                                                                                                             27-SEP-1995;
                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                         03-APR-1997.
                                                                                                                                                                                                                                    AAW21983;
                                                                                                                                                                                                                     RESULT
ઠે
                                                                                                                                                                                                  셤
```

Sandrin MS, Mckenzie IFC, Apostolopoulos V;

WPI; 1997-212670/19

96WO-AU000617 95AU-00005680

```
Sequence 29 AA;
                                      adenocarcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             utilising a molecular affinity tag. This sequence shows a molecular tag encoded by AA089357, and contains an endoglucinase III linker domain (EGIII LD) and a factor Xa cleavage recognition site. A nucleotide encoding a recombinant protein of interest can be inserted into a MCS (multiple cloning site), downstream of the cleavage site. The fused protein is purified when the EGIII LD is linked to an EGIII cellulose binding domain which binds to cellulose and affinity chromatography is carried out. The recombinant protein can then be recovered without the tag by cleavage using a specific protease, eg. factor Xa
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Prodn. and purificn. of recombinant protein without abnormal folding adding fused protein to transformed host organism and purifying fused protein by affinity chromatography using cellulose@ carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
/note= "factor Xa cleavage recognition sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant proteins can be produced by affinity purification by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 71; DB 2; Length 38;
Pred. No. 4.8e+02;
5; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151 PTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTSI 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Fig 3; 14pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%;
                                                                                                                                                                                  93JP-00071559
                                                                                                                                                                                                                                              93JP-00071559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 48.8<sup>1</sup>
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                        (TOXS ) TOYO ENG CORP.
                                                                                                                                                                                                                                                                                                                                                                 WPI; 1994-353764/44.
N-PSDB; AAQ89357.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 38 AA;
                                                            JP06277088-A.
                                                                                                                                                                               30-MAR-1993;
                                                                                                                                                                                                                                           30-MAR-1993;
                                                                                                                     04-OCT-1994.
```

```
ä
                                                                                                                   Muc pep9 is a peptide derived from the variable number of tandem repeat (VNTR) region of human cancer mucin MUC2. Unlike other mucin VNTR-derived peptides (AAWA1215-85), it is not capable of binding to anti-Gal alpha(1,3)Gal antibody. A novel ancer vaccine comprises a peptide (AAWA121680-86) which mimics MUC1 or other cancer peptides and one or more pharmaceutically acceptable carrier or diluent, optionally in association with an appropriate carrier peptide or other therapeutic agent. Some mucin VNTR peptides (AAWA1975-82) may also be used. The vaccine is used in the treatment of a patient suffering from, or with a predisposition to, adenocarcinoma (claimed)
Cancer vaccine containing MUC1 peptide mimic - used in the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

4.0%; Score 70.5; DB 2;
Best Local Similarity 57.1%; Pred. No. 3.8e+02;
Matches 16; Conservative 2; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168 PTTTTVPTTMTVSTTTSVPTTTSIPTT 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 Piripisir-iMVrPiPrPiGiQTPir 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search completed: June 29, 2005, 09:41:07
Job time : 230.354 secs
                                                                       Example 1; Page 27; 55pp; English.
```

THIS PACE BLANK DEPTON

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

June 29, 2005, 08:57:16; Search time 30.1847 Seconds (without alignments) 1064.659 Million cell updates/sec Run on:

US-10-718-321-7 1749 1 MHPQVVILSLILHLADSVAG......PFKKEVQQLRPHKSCIHQRE 334 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		,			SUMMARIES	
Result No.	Score	& Query Match	* Query Match Length	DB	a a	Description
-	1309	74.8	451	~	871754	cellular hepatitis
7	260	14.9	770	7	T22808	
٣	246.5	14.1	662	~	A45155	mucin FIM-C.1 - Af
4	244	14.0	400	-	A28172	spasmolysin precur
5	242.5	13.9	851	7	T22696	hypothetical prote
9	234	13.4	371	7	S20075	
7	229	13.1	216	~	I51920	mucin - rhesus mac
80	227.5	13.0	1832	~	T31113	mucin-like glycopr
6	221.5	12.7	3020	~	A43932	mucin 2 precursor,
10	219.5	12.6	327	~	S20074	ţ
11	216.5	12.4	294	7	A37232	mucin, tracheal (A
12	215	12.3	232	7	A60095	larval glue protei
13	214.5	12.3	235	~	PC2022	mucin like protein
14	213	12.2	167	~	A33532	mucin SMUC-40 - hu
15	212.5	12.1	307	Н	GSFF3	salivary glue prot
16	206	11.8	1161	N	S57180	probable membrane
17	205	11.7	447	N	A39321	mucin - rat (fragm
18	202.5	11.6	825	~	T29634	hypothetical prote
19	201.5	11.5	379	~	S50125	larval glue protei
20	201	11.5	099	~	JW0067	chitinase (EC 3.2.
21	200.5	11.5	1118	~	A48292	mucin, tracheobron
22	198	11.3	1513	~	A54895	mucin 2, intestina
23	195	11.1	345	7	E88103	protein W10G11.5 [
24	194	11.1	693	~	T19551	mucin-like protein
25	192.5	11.0	708	N	T19474	hypothetical prote
56	192.5	11.0	196	~	T21460	
27	191	10.9	798	7	T34248	
28	190.5	10.9	592	N	T34446	ical
53	189.5	10.8	474	N	S15921	protein TPX-VT3 -

hypothetical prote	grycopiocein a pre protein-tyrosine k	mucin - rat	salivary glue prot	hypothetical prote	hypothetical prote	hypothetical prote	mucin SAC (clone J	hypothetical prote	hypothetical prote	conserved hypothet	mucin 5AC (clone J	hypothetical prote	salivary glue prot	membrane glycoprot
T16232	3710	24169	801360	S48940	T20609	T34293	853363	AD2067	T34369	AE0332	S53362	T32661	S01358	T45462
12	2 5	ഗ												
2 -	4 6 5 E	2	7	7	N	N	7	0	~	7	~	0	0	7
977 2 TI	- 7	~	263 2	605 2	795 2	790 2	279 2	602 2	1777 2	921 2	477 2	560 2	217 2	866 2
~ ~	1235 2	292 2							•					
977 2	10.7 1235 2	10.7 292 2	10.6	10.6	10.5	10.4	10.4	10.4	10.3	10.3	10.2	10.1	10.0	10.0

ALIGNMENTS

	RESULT 1 S71754 cellular hepatitis A ren Nalternate names: surfi C5Species: Cercopithecu C,Date: 29-Jan-1998 #set CAccession: S71754 R;Kaplan, G.; Totsuka, BMBO J. 15, 4282-4296, A;Title: Identification A;Reference number: S71 A;Accession: S71754 A;Molecule type: mRNA A;Residues: 1-451 KARP> A;Cross-references UNRPA	RESULT 1 S71754 cellular hepatitis A receptor HAVcr-1 precursor - green monkey NiAlternate names: surface glycoprotein C;becies: Cercopithecus acthiops (green monkey, grivet) C;bate: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004 C;Accession: S71754 R;Kaplan, G.; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M. EMBO J. 15, 4282-4296, 1996 A;Fitle: Identification of a surface glycoprotein on African green monkey kidney cells a A;Fitle: Identification A;A;Molecule type: m2NA A;Reference number: S71754 A;Molecule type: m2NA A;Residues: 1-451 KARP A;Residues: 1-451 KARP A;Residues: 1-451 KARP A;Cross-references: UNIPROT: 095144; EMBL: X98252; NID: q1526573
	A, Experimental source: ki C, Keywords: glycoprotein F,1-17/Domain: signal sec F,18-451/Product: celluli	A;Experimental source: kidney C;Keywords: glycoprotein F;1-17/Domain: signal sequence #status predicted <sig> F;18-451/Product: cellular hepatitis A receptor HAVcr-1 #status predicted <mat></mat></sig>
	Query Match Best Local Matches 25	Query Match 74.8%; Score 1309; DB 2; Length 451; Best Local Similarity 63.3%; Pred. No. 8.8e-74; Matches 255; Conservative 36; Mismatches 32; Indels 80; Gaps 3;
	ος, 10 11	1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCMNRGSCSLFTCQNG 60
··-·	Oy 61 Db 61	IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
	Oy 121 Db 121	SLEIVPPKVTTPIVITVP 139 : : SLKIGPPRVTTPIVRTVRTSTTVPTTTTPPTTTTLPTTTTLPMTTTLPMTTTLP 180
	Qy 140 Db 181	TVTTVRISTIVPITITIVP
· • · · · •	Qy 183 Db 241	TSVPTTSIPTTSVPVTTTVSTPVPPMPLPRQNHEPV 220
	Oy 221 Db 301	ATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH 280
	Qy 281 Db 361	SLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQL 323

```
A,Cross-references: UNDRROT:P10667; GB:M19971; NID:g214791; PIDN:AAA49960.1; PID:g214792 C; Superfamily: spasmolysin; trefoil homology C; Superfamily: spasmolysin; trefoil homology C; Keywords: duplication; glyvoprorein; skin; tandem repeat C; Keywords: duplication; glyvoprorein; skin; tandem repeat C; Keywords: alganal sequence #status predicted <SIG> P:1-400/Domain: status predicted <SIG> P; 21-400/Product: spasmolysin I #status predicted <ART> F; 21-400/Product: spasmolysin I #status predicted <ART> F; 21-400/Product: spasmolysin I #status predicted <ART> F; 21-400/Product: spasmolysin-glycopeptide #status predicted <SPG> F; 21-3-38/Product: spasmolysin-glycopeptide #status predicted <SPG> F; 21-3-38/Region: Prefoil homology <TRP2> F; 115-309/Region: Prefoil homology <TRP2> F; 115-309/Region: Presidue repeats (B-T-T-T-V-P-T-T-A) F; 21-220, 240-248/Region: 9-residue repeats (B-T-T-T) F; 21-420/Domain: trefoil homology <TRP3> F; 21-400/Product: spasmolysin II #status predicted <SP2> F; 31-400/Product: spasmolysin II #status predicted <SP2> F; 31-400/Broduct: spasmolysin II #status predicted <SP2> F; 31-400/Broduct SP2 F; 31-400/Bro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Biol. Chem. 263, 7686-7690, 1988
A;Title: A new repetitive protein from Xenopus laevis skin highly homologous to
A;Reference number: A28172; MUID:88227968; PMID:3372504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246
                                 411
                                                                                          189
                                                                                                                                                    471
                                                                                                                                                                                                              190 SIPTITSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSP 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 KDTRYKLLGDLSRRDVSLTIBNTAVSDSGVYCCRVEHRGWFNDMKITVSLEIVPPKVT-- 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 POT-----TTASTTARTTTVPTT-------PETTTVPTTPETTTVP 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
                                                                                                                                                                                                                                                                                                                                                                                                                                        spasmolysin precursor - African clawed frog
NyAlternate names: prospasmolysin
C;Species: Xenopus laevis (African clawed frog)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: A28172
R;Hoffmann, W.
367 RGITADQCROKNCCFDSSI-----SGTKWC-----FYSTSQVAATKTTTTFTTT
                                                                                          132 TPIVTTV--PTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTPIVTTVPTVTTVPTVRTSTTVPTTTVP----TTTVPTTMSIPTTTVPTTMTVSTTTSVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   187 TTTSIPTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPT
                                                                                                                                                 412 iprırirrıkarırirpririrpirririrririrkarırıriripririr
                                                                                                                                                                                                                                                                    -----TTTTTTTTTKATT-----TTPTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 DSVAGSV-KVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNGIVWTNGTHV--TYR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      213 ETTTVPTT---PETTTVPT--TPETTTASTTAETTTVPTTPE-TTTEPTTDTTPPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 14.0%; Score 244; DB 1; Length 40 1. Similarity 31.9%; Pred. No. 3.8e-08; 83; Conservative 24; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   247 SSPLYSYTTD-GNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       267 LPPTPETTTETTTETT
                                                                                                                                                                                                                                                     : ||||: ||||
472 TTPTTTTTKATTTTPT---
                                                                                                                                                                                                                                                                                                                              250 LYSYTTDGNDTVT 262
                                                                                                                                                                                                                                                                                                                                                                                    510 TTTTTKATTTT 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-400 <HOF>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  131
                                                                                                                                              g
                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8, %
                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                             C;Accession: A45155
R;Hauser, F.; Hoffmann, W. 4.
Siol. Chem. 267, 24624, 1992
A;Title: P-domains as shuffled cysteine-rich modules in integumentary mucin C.1 (FIM-C.1 A;Reference number: A45155; MUID:93077556; PMID:1447205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB:L02115; NID:g214147; PIDN:AAA74725.1; PID:g95146d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSKREDCGYSGITESQCRTKGCC----FDSSIPQTKWCFYTLSQVADCKVEPSQRVDCGF 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTTTVPPTTTSTTTTTTTVPPTTTSTTTTTTTTVPPTTTSSTTTTVPPTTTSSTTTTTVP 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147 PITITISTITITIVPPITISTITITIVPALTITIVPPITITIVPP------TISTITITIVP 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              230 AETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTE----SSD----GLWNNNQTQLFLE 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           K-LLGDLSRR-----DVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVSLEIVPPKVTT 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Xenopus laevis (African clawed frog)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 09-Jul-2004
C;Accession: A45155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIMIVSTITISV--PITISIPITISVPVITI----VSTFVPPMPLPRQNHEPVAISPSSPQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TVSLEIVPPKVTTTPIVTTV-PTVTTVRTSTTVPTTTTV----PTTMSIPTTTVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66; Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 246.5; DB 2; Length 662;
; Pred. No. 4.4e-08;
25; Mismatches 90; Indels 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 260; DB 2; Length 770;
; Pred. No. 7.6e-09;
18; Mismatches 66; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Genetics:
A;Gene: CESP:F56H9.1
A;Map position: 5
A;Introns: 235/1; 262/2; 320/1; 367/2; 510/3; 654/1; 681/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PSVTLPCHYSGAVTSMCWNRGSCSLFTCQNGIVWTNGTHVT-
                                                                                          Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mucin FIM-C.1 - African clawed frog (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:Q05049; GB:L02
F;162-202/Domain: trefoil homology <TRF1>
F;307-347/Domain: trefoil homology <TRF2>
F;354-344/Domain: trefoil homology <TRF3>
F;226-566/Domain: trefoil homology <TRF3>
F;526-566/Domain: trefoil homology <TRF5>
F;526-61/Domain: trefoil homology <TRF5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 30.4%;
Matches 77; Conservative 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 40.9%;
Matches 79; Conservative 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              --HSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VTYSNLVANIIPG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A, Accession: A45155
A, Status: preliminary
A, Molecule type: mRNA
A, Residues: 1-662 <HAU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
```

pancreati

us-10-718-321-7.rpr

```
R;An, G.; Luo, G.; Wu, R.
Am. J. Regpit. Cell Mol. Biol. 10, 546-551, 1994
AjTitle: Expression of MUC2 gene is down-regulated by vitamin A at the transcriptional le
A;Reference number: IS1920; MUID:94235322; PMID:8179918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A,Accession: I51920
A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: mRNA
A,Residues: 1-216 <RES>
A;Residues: 1-216 <RES>
A;Cross-references: UNIPROT:Q28501; EMBL:U00483; NID:g437054; PIDN:AAA20963.1; PID:g43705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mucin-like glycoprotein 900 - Cryptosporidium parvum
C;Species: Coct-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004
C;Acces: 20-Cot-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004
B;Barnes, D.A.; Bonnin, A.; Huang, J.X.; Gousset, L.; Wu, J.; Gut, J.; Doyle, P.; Dubreme
Mol. Biochem. Parasitol. 96, 93-110, 1998
A;Title: A novel multi-domain mucin-like glycoprotein of Cryptosporidium parvum mediates
A;Reference number: Z20989; MuID:99066935; PMID:9851610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:096503; EMBL:AF068065; NID:g4063041; PID:g4063042; PIDN:AAC96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             127 PKVTTTPIVTTVPTVTTVRISTTVP-TTTTVPTTTVPTTMSIPTTTVPTTMTVSTTTSV 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330
169 TTTTV----PTTMTVSTTTSVPTTTSIPT-----TTSVPVTTTVSTFVPPMPLPRQNHE 218
                                                                                                                                                                                         278 PITITIEAPAEPITIATPI-----NIPIPAPETECEVDGCEVCEGDSAARCARSREDYF 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        186 PITISIPITISVPVITIVSIFVP-PMPLPRQ--NHEPVAISPSSPQPAETHPTILQGAIR 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144 VRTSTTVPTTTTVPTTTVPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSVPVTTTV 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mucin - rhesus macaque (fragment)
C;Species: Macaca mulatta (rhesus macaque)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
                                                             219 PVATSPSSP-QPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNQTQLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PITTTTTATPTPTPTSTQTPTSTPITTTTATPTPTPTFTQTPTSTPITTTTTATPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91 TIENTAVSDSG--VY----CCRVEHRGWFNDMKITVSLEIVPPKVTTTPIVTTVPTVTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          278 SFEQVQIFDMGSKVYIPYTKCVGVKH-----TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 REPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120 -TPTPTPTTAMTPTPTPTS-----TQTPTVTPITTTT
                                                                                                                                                                                                                                                                                                                                          332 LIDERICLVYCDGGVAAVSSGVAAAAVVCVAVLFSVGL 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.8e-06;
ches 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2;
                                                                                                                                                                                                                                                                             278 L--EHSLL-----TANTTKGIYAG--VCISVLVLLAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
13.1%; Score 229; DB 2;
Best Local Similarity 38.0%; Pred. No. 1.7e-07;
Matches 63; Conservative 16; Mismatches 69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.0%; Score 227.5; 31.2%; Pred. No. 1.8e iive 22; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 31.2
Matches 64, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Accession: I51920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Gene: MUC2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genetics
                                                  셤
                                                                                                                                  ઠે
                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cipacing surface antigen P2 (clone 2.5) precursor - Leishmania major (fragment)
Cipacies: Leishmania major
Cipace: 13-Jan-1995 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004
Cipace: 13-Jan-1995 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004
Cipace: 13-Jan-1995 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004
Cipace: 26075; C41710
R;Murray, P.J.; Spithill, T.W.
J; Biol. Chem. 266, 24477-24484, 1991
A;Title: Variants of a Leishmania surface antigen derived from a multigenic family.
A;Reference number: A41710; MUID:92105105; PMID:1761547
A;References: UNIPROT:Q25333; EMBL:X57134; NID:99580; PID:99581
C;Keywords: blocked carboxyl end; glycoprotein; phosphatidylinositol linkag
F;1-343/Product: promastigote surface antigen P2 (fragment) #status predicted <PRP>F;344-371/Domain: carboxyl-terminal propeptide #status predicted <PRP>F;343/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Asp) (in mature form
                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-851 <WIL>
A;Cross-references: UNIPROT:017893; EMBL:Z83318; PIDN:CAB05903.1; GSPDB:GN00022; CESP:F5
A;Experimental source: clone F55B11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  177 MTV--STTTSVP-TTTSIP-TTTSVP-VTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAE 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LMKVLRVLD--LDSTKVCG-----TLPAE------WSRMSTAAY-----FWLN-- 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----IVPPKVTTTPIVTTVPTVTTVRTSTTVP----TTTTVPTTTVPTTMSIP 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----NYDLSGTLPPQWSSMPYLR-GVSLKGKRFCGCVPESWANKADLAVEIEDKHK 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                        C;Species: Caenorhabditis elegans
C;Aate: 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22696
R;Ainscough, R.
submitted to the EMBL Data Library, December 1996
A;Reference number: Z19601
A;Accession: T22696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VPPKVTTTP-IVTTVPTVTTV--RTSTTVPTTTT----VPTTTVP-TTMSIP-TTTTVPTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 LSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNGIVWTNGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 HVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVSLE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.4%; Score 234; DB 2; Length 371; 29.3%; Pred. No. 1.4e-07; Indels ive 28; Mismatches 127; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.9%; Score 242.5; DB 2;
46.8%; Pred. No. 1e-07;
tive 15; Mismatches 48;
                                                                                              hypothetical protein F55B11.3 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540 TTTTTVPTTTTVPTTTTVSTTTTVPTTTTA 573
                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Map position: 4
A;Introns: 49/3; 123/3; 226/1; 282/3; 669/3; 743/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
tes 99; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 72; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Gene: CESP:F55B11.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genetics:
```

ઠે a δ ď ò g

ઠે 요 ò 셤 ò 셤

ģ

Wed Jun

```
A,Title: Human intestinal mucin-like protein (MLP) is homologous with rat MLP in the C-te A,Feference number: PQ0328; MUID:92198477; PMID:1550588
A,Reference number: PQ0328
A,Rocession: PQ0328
A,Residues: 2328-2468 «XUG>
A,Residues: 2328-2468 «XUG>
A,Residues: 2328-2348 «XUG>
A,Residues: 2328-2342 «XUG>
A,Residues: 2328-2342 «XUG>
A,Residues: 2328-2342 (**,2344-2354 «XUG)>
A,Residues: 2328-2342 (**,2344-2354 «XUG)>
A,Residues: 2328-2342 (**,2344-2354 «XUG)>
A,Residues: 2328-2342 (**,2344-2354 *XUG)>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A,Accession: S20074
A,Molecule type: mRNA
A,Robesidues: 1-327 <br/>
A,RObesidues: 1-327 <br/>
A,Cross-references: UNIPROT:Q25334; EMBL:X57135; NID:g9582; PID:g9583
C;Keywords: blocked carboxyl end; glycoprotein; lipoprotein; phosphatidylinositol linkage F;1-299/Roduct: promastigote surface antigen P2 (fragment) #status predicted <PSA>F;300-327/Domain: carboxyl-terminal propeptide #status predicted <CTP>F;299/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Asp) (in mature form)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GDB:120203; OMIM:158370
A;Map position: 11p15.5-11p15.5
C;Superfamily: von Willebrand factor; von Willebrand factor type A repeat homology; von V
C;Keywords: glycoprotein; intestine; tandem repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    promatigote surface antigen P2 (clone 4.6) precursor - Leishmania major (fragment) C;Species: Leishmania major C;Species: Leishmania major C;Species: Leishmania major C;Acession: S20074; D41710 R;Murray, P.J.; Spithill, T.W. J. Blol. Chem. 266, 24477-24484, 1991 A;File: Variants of a Leishmania surface antigen derived from a multigenic family. A;Reference number: A41710; MUID:92105105; PMID:1761547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1632 TTTLPPTTTPSPPTTTTTPPPTTTTPSPPTTTTTPSPPTTTTPPTTTTPSP 1691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            126 PPKVTTTPIVTTVPTTVPTTTVPTTTVPTTTV-----PTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 ------WINGTHVIYRKDIRYKULGDLSRRDVSLIIENTAVSDSGVYCCRVEHRGWFND 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TV----PITMIVSTITSVPITIS-----IPTITSVPVITIVSTFVPPMPLPRQNHEPVAI 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1573 PPTTTPSPPTTTTPSPPTTTTPPPPTTTPSPPTTTTPPPTTTPSPPTTT-PITPPTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 TTTSVPTTTSIP---TTTSVPVTTTVS---TFVPPMPLPRQNHEPVATSPSS-----PQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34 KVSG-----TLPPEWSGMSKAAYFWLNNCDL----SGTLPPQWSSMPNLRGVSLKGNRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116 MKITVSLEIVPPKVTTTPIVTTVPTVTTVRTSTTVP----TTTTVPTTTVPTTMSIPTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Keywords: glycoprotein; intestine; tandem repeat F;2766-2834/Domain: von Willebrand factor type C repeat homology <VWC>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 12.6%; Score 219.5; DB 2; Length : Best Local Similarity 25.7%; Pred. No. 1e-06; Matches 86; Conservative 38; Mismatches 117; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          =
=
=
=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1692 PITIMIT-----PSPITIPSSPITI----TITIPSS 1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23 KVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCONGIV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            230 AETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | | : : : | | : | : | 84 CGCVPDSWANKADLAVEIEDKHKGSDCLAGKDCTTTT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 221.5; DB 2
Pred. No. 7.2e-06;
9; Mismatches 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12.7%;
41.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ll Similarity 41.7
65; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Gene: GDB: MUC2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A, Status: not compared with conceptual translation
A, Residues: 1037-1020
A, Residues: 2037-1020
A, Residues: 2037-1020
A, Residues: 2037-1020
A, Esperimental source: colon
A, Experimental source: colon
A, Note: sequence extracted from NCBI backbone (NCBIP:116698)
B, Totibara, N.W.; Gum Jr., J.R.; Culhane, P.J.; Lagace, R.E.; Hicks, J.W.; Petersen, G.W. J. Clin. Invest. 88, 1005-1013, 1991
A, Title: MUC-2 human small intestinal mucin gene structure. Repeated arrays and polymorp
A, Reference number: A43932; MUID:91358717; PMID:1885763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1343-1350, L', 1352-1411, S', 1413-1448, P', 1450-1503, T', 1505-1915 <TOR>
A; Residues: 1343-1350, L', 1352-1411, S', 1413-1448, P', 1450-1503, T', 1505-1915 <TORS-
A; Cross-references: GB:M74027; NID:g188863; PIDN:AAAS9955.1; PID:g188864
A; Note: sequence inconsistent with the nucleocide translation
A; Note: sequence extracted from NCBI backbone (NCBIN:55749, NCBIP:55750)
B; Gum, J.R.; Byrd, J.C.; Hicks, J.W.; Toribara, N.W.; Lamport, D.T.A.; Kim, Y.S.
J. Biol. Chem. 264, 6480-6487, 1989
A; Title: Molecular cloning of human intestinal mucin cDNAs. Sequence analysis and eviden
A; Reference number: A33532; MUID:89197956; PMID:2703501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rigum Jr., J.R.; Hicks, J.W.; Toribara, N.W.; Rothe, E.M.; Lagace, R.E.; Kim, Y.S.
D. Biol. Chem. 267, 21375-21383, 1992
A;Title: The human MCC2 intestinal mucin has cysteine-rich subdomains located both upstr
A;Reference number: A45106; MUID:93016075; PMID:1400449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: mRNA
A;Residues: YT',1925-1948,'TTS',1952-1954 «JAN»
A;Experimental source: bronchus
R;Xu, G.; Huan, L.; Khatri, I.; Sajjan, U.S.; McCool, D.; Wang, D.; Jones, C.; Forstner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ^{\mathsf{the}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cispecies: Homo sapiens (man)
Cibaces 10-Mar-1993 #sequence revision 12-Apr-1996 #text_change 09-Jul-2004
Cibacession: A99963; A45106; B45106; A43332; B33532; A61257; P00328; P00329
CiAccession: A99963; A45106; B45106; A43332; B33532; A61257; P00328; P00329
R;Gum Jr., J.R.; Hicks, J.W.; Toribara, N.W.; Siddiki, B.; Kim, Y.S.
J. Biol. Chem. 269, 2440-2446, 1994
Jahlo. Chem. 269, 2440-2446, 1994
A;Title: Molecular cloning of human intestinal mucin (MUC2) cDNA. Identification of A;Reference number: A49963; MUID:94132002; PMID:8300571
                                                                                                      390
                                                                                                                                                                              263
                                                                                                                                                                                                                                                  437
                                                        STFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTE
                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1916-2193 <GU4>
A; Residues: 1916-2193 <GU4>
A; Cross-references: GB-M22405; NID:g188873; PIDN:AAA36334.1; PID:g188874
A; Experimental source: incestine
B; Jany, B.H.; Gallup, M.W.; Yan, P.S.; Gum, J.R.; Kim, Y.S.; Basbaum, C.B.
Clin. Inroset. 87, 77-82, 1991
A; Title: Human bronchus and incestine express the same mucin gene.
A; Reference number: A61257; MUID:91086481; PMID:1995113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 626-1895 <GU2>
A;Cross-references: GB:M94131; NID:g186395; PIDN:AAA59163.1; PID:g186396
A;Note: sequence extracted from NCBI backbone (NCBIP:116706)
A;Accession: B45106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-references: UNIPROT:Q02817; UNIPROT:Q14884; GB:L21998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A, Accession: A61257
A, Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mucin 2 precursor, intestinal - human (fragments)
N;Alternate names: mucin SMUC-41
                                                                                                                                                                                                                                                                                                                          264 SSDGLWNNNQTQLFLEHSLLTANTT 288
                                                                                                                                                                                                                                                                                                                                                                                       438 TTTTTTTTTKKPTTTTTTTTTT 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecule type: mRNA; Residues: 1-639 <GU1>
                                                                                                                                                                                                                                                  TT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: A49963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Accession: B33532
                                                                                                      331
                                                                                                                                                                              204
                                                                                                                                                                                                                                                  391
                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                          ઠ
```

13;

83

1631

98

Gaps 8;

```
mucin like protein Muc2 precursor - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 14-Jul-1994 #sequence_revision 14-Jul-1994 #text_change 16-Aug-2004
C;Accession: PC2022
R;Hansson, G.C.; Baeckstroem, D.; Carlstedt, I.; Klinga-Levan, K.
Biochem. Biophys. Res. Commun. 198, 181-190, 1994
A;Title: Molecular cloning of a cDNA coding for a region of an apoprotein from the 'insol A;Reference number: PC2022; MUID:94121629; PMID:8292021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: mRNA
A;Residues: 1-235 <HAN>
A;Cross-references: UNIPROT:Q63349; GB:Z29072; NID:g435534; PIDN:CAA82313.1; PID:g435535
A;Experimental source: intestine
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Superfamily: von Willebrand factor type A repeat homology; von Willebrand factor type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      126 PPKVTTTPIVTTVPTVTT-VRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVSTTTS 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      185 VPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGAIRRE 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92 VTPTPETTTTOISTSTSTTKITTPTPTFITETSTPISTTSOTPSPASTTTVTPVTTSTTTE 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYT 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                47 VYCC------ICITSTPPS-TTTEIQTTTSTTKTSIPTSTAMKTPSPSPTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102 VYCCRVEHRGWFNDMKITVSLEIVPPKVTTTPIVTT-----VPTVTTVRTSTTVPTTT
                                                                                                                  A;Introns: 10/1
C;Superfamily: salivary glue protein
C;Keywords: glycoprotein; salivary gland; tandem repeat
F;1-23/Domain: signal sequence #status predicted <SIG>
F;43-66,94-104/Region: 11-residue repeats (T-T-T-T-P-C-P-T-T-T)
F;105-160/Region: 8-residue repeats (T-T-T-T-T-P)
                                                                                                                                                                                                                                                                                                                                                                                                   Length 232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        155 TVP----TTTVPTTMSIPTTTVPTTMT------
                                                                                                                                                                                                                                                                                                                                                                                               Query Match 12.3%; Score 215; · DB 2; Best Local Similarity 41.4%; Pred. No. 1.3e-06; Matches 58; Conservative 11; Mismatches 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12.3%; Score 214.5; DB 2
30.5%; Pred. No. 1.4e-06;
trive 20; Mismatches 68
A;Gene: FlyBase:Dvir/Lgp1
A;Cross-references: FlyBase:FBgn0010305
A;Map position: X16A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245 PISSPLYSYTIDGNDTVTES 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157 TṛTrP----ṛTTTOTTTRA 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Keywords: glycoprotein
F;1-53/Region: cysteine-rich
F;54-235/Region: serine/threonine-rich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           255 IDGNDTVTESSDGLWNNNQT 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 61; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Map position: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
A33532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                        M37232
mucin, tracheal (AMN-22) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 14-Feb-1992 #sequence_revision 14-Feb-1992 #text_change 09-Jul-2004
C;Accession: A37232
R;Gerard, C; Eddy Jr., R.L.; Shows, T.B.
J. Cilin. Invest: 86, 1921-1927, 1990
A;Title: The core polypeptide of cystic fibrosis tracheal mucin contains a tandem repeat A;Reference number: A37232; MUID:91072667; PMID:2254452
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 larval glue protein Lgp-1 precursor - fruit fly (Drosophila virilis)
C;Species: Drosophila virilis
C;Date: 03-Mar-1993 #sequence revision 03-Mar-1993 #text_change 09-Jul-2004
C;Accession: A60095; S50126; $44060
R;Swida, U.; Lucka, L.; Kress, H.
Development 108, 269-280, 1990
A;Title: Glue protein genes in Drosophila virilis: their organization, developmental con A;Reference number: A60095; WUID:90276249; PMID:2351069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Wolecule type: DNA
A; Residues: 1-232 <SWID.
A; Residues: 1-232 <SWID.
A; Cross-references: UNIPROT: Q27423; GB: X76203; NID: g433481; PIDN: CAA53796.1; PID: g433482
A; Cross-references: U.; Kress, H.
Biochim. Biophys. Acta 1219, 576-580, 1994
A; Title: Molecular cloning of the Drosophila virilis larval glue protein gene Lgp-3 and A; Reference number: S50125; MUID: 95002181; PMID: 7918662
A; Accession: S50126
A; Status: preliminary; nucleic acid sequence not shown; translation not shown
A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:Z29565; NID:g450901; PIDN:CAA82672.1; PID:g450903
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, January 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      è,
TITIKPPITITITITITITITITIKPPITIATITKPPITITIKPPITITKPPITITSITKLPTT 237
                                                                             SPSSP-QPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS------DGLWNNN 272
                                                                                                                                      238 TTEAPAEPTITATPI-----NTPIPAPETECEVDGCEVCEGDSAARCARCREDYFRIDE 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127 PKVTTTPIVTTVPTVTTVRTSTTVP-TTTVPTTTVPTT-----MSIPTTTV-PTTMT 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----STFVPPMPLPR 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                215 QNHEPVAT------RESPQPAETHPTTLQGAI-----RREPTSSPLYSYT 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 PITITIMVIPIPITISTQTPTPIPITITITIVIPIPIPISTQRTTPISITITITITITITIP 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63;
                                                                                                                                                                                                                                                                                 :| | : : : : : | | | | :: | | : | | : | | : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | | : : | : : | | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : : | : : | : : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : : | : : : | : : : : | : : : | : : : | : : | : : : | : : : | : : | : : : | : : : | : : : | : : : | : : : | : 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .4e-06;
                                                                                                                                                                                                                                273 QTQL-FLEHSLLTANTTKGIYAGVCISVLVLLAL 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TDGNDTVTESSDGLWNNNQTQLFLEHSLLTANT 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTVTPTPTPTS-----TOSTTPTPTTTTNT 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179 VSTTTSV----PTTTSIPTTTSVPVTTTV----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12.4%; Score 216.5;
32.9%; Pred. No. 1.4e
:ive 19; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-references: UNIPROT: Q99322; GB:M57417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 32.99
Matches 70; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-294 <GER>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Molecule type: DNA
Residues: 1-232 <LA2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Note: tne
C;Genetics:
                                                                                                                                  a
                                                                                                                                                                                                                                ò
                                                                     ઠે
                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ë

51;

Indels

Length 235;

154

16

----VSTTTSVPTTTSIPTT 194

SMUC-40 - human (fragment)

```
C.Specials: Homo sapiens (man)
C.Specials: Homo sapiens (man)
C.Specials: Homo sapiens (man)
C.Specials: Homo sapiens (man)
C.Date: 29-Jan-1990 #sequence_revision 27-Jun-1994 #text_change 09-Jul-2004
C.Date: 29-Jan-1990 #sequence_revision 27-Jun-1994 #text_change 09-Jul-2004
C.Date: 29-Jan-1990 #sequence_revision 27-Jun-1994 #text_change 09-Jul-2004
R.Jaccession: A33532
J. Biol. Chem. 264, 6480-6487, 1989
J. Briol. Chem. 264, 6480-6487, 1989
J. Briol. Chem. 264, 6480
J. Briol. Chem. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Galivary glue protein ags-3 - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Species: B-May-1986 #sequence_revision 28-May-1986 #text_change 09-Jul-2004
C;Accession: A03329
R;Garfinkel, M.D.; Pruitt, R.E.; Meyerowitz, E.M.
A;Mol. Biol. 168, 765-789, 1983
A;Title: DNA sequences, gene regulation and modular protein evolution in the Drosophila A;Reference number: A92904; MUID:83294545; PMID:6411930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A,Cross-references: UNIPROT:P02840, GB:X01918; NID:g8581; PIDN:CAA25994.1, PID:g603989
C,Comment: This protein is produced by third-instar larvae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80 TIQLPCTIP--TITKATITKRTITKATITKATITKPITIKQTITQLPCTIPITITKQTITQ 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEP----VATSPSSPQPAETHPTT 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85 Prereigrerer--eirir--rrvrererergrererrrrrrrrrrrrrrrgr 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----TVPTTTVPTTMS 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    167 IP---TTTTVPTT---MTVSTTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPV 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138 LÞCTTPTTTKPTTTKPTTTKPTTTKPTTTK-PTTTK-PTTTKPTTTKPTTTKPTTTKPTTT-KPT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LIPTRITITIVIPERPIPITGIQIPISSIPISTITIVIPERPIGIQIPITITIVI-T 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 12.2%; Score 213; DB 2; Length 167;
Best Local Similarity 41.0%; Pred. No. 1.3e-06;
Matches 57; Conservative 11; Mismatches 51; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 23; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 307;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221 ATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTE 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        119 TVSLEIVPPKVTTTPIVTTVPT---VTTVRTSTTVPTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12.1%; Score 212.5; DB 1 38.0%; Pred. No. 2.5e-06; rative 14; Mismatches 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,Cross-references: PlyBase:FBgn0003373
A;Map position: 3L (68C)
A;Introns: 10/1
C;Superfamily: salivary glue protein
C;Keywords: salivary gland; tandem repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Search completed: June 29, 2005, 08:58:14
Job time : 32.1847 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237 LQGAIRREPTSSPLYSYTT 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------PTSTPITTNTT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 38.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 1-307 <GAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

- protein search, using sw model OM protein Run on:

June 29, 2005, 08:57:16; Search time 4.69941 Seconds (without alignments) 1064.659 Million cell updates/sec

US-10-718-321-7_COPY_249_300

275 - - - 1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL 52 Title: Perfect score: Sequence:

283416 segs, 96216763 residues

BLOSUM62 Gapop 10.0 , Gapext 0.5

Scoring table:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 79:*
1: pir1:*
3: pir2:*
3: pir3:*
1: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	cellular hepatitis	mitochondrial oute	proteinase related	hypothetical prote		,	acetylcholine rece	cytochrome c [vali	prophage pi3 prote	chitinase VC1952 [structural polypro	hypothetical prote	muscarinic acetylc				structural polypro	protein R11G11.14	hypothetical prote	hypothetical prote	toxin-like outer m	glycoprotein VP7 p	N-acety1muramoy1-L	polyprotein(C, E,	genome polyprotein		genome polyprotein	genome polyprotein	DNA-directed DNA p
SUMMAKIES	ID	871754	S48959	A90267	T18619	T29478	836519	A45769	CCBN	E86797	C82135	JQ1978	T45053	A55019	VHWVVE	VHWVVT	B44213	D44213	H88930	S17909	T18752	H71879	VGXRER	875217	A47311	C32401	B32401	A32401	GNWVWP	D86890
	DB	~	~	~	~	N	~	~	, - -	N	~	Н	N	~	-	-	-	-	7	N	7	~	Н	~	N	~	~	N	Н	7
	Length	451	639	1269	329	402	472	602	103	520	846	1254	321	639	1254	1254	1255	1255	405	696	394	2399	326	338	775	792	792	792	1226	1658
•	A Query Match	82.9	22.7	22.7	22.5	ς.	22.5	21.8	21.6	21.6	21.5	21.5	21.1	21.1	21.1	21.1	21.1	21.1	20.9	20.9	20.7	20.7	20.5	20.5	20.5	•	20.5	•	•	20.5
	Score	228	62.5	62.5	62	62	62	9	59.5	59.5	59	59	28	58	58	28	58	58	57.5	57.5	57	57	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
	Result No.	-	8	m	4	ī.	9	7	80	o	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	53

30	56.5	20.5	3396	7	A42551	genome polyprotein
31	26	20.4	105	7	E84075	hypothetical prote
32	26	20.4	398	7	E70113	acetyl-CoA C-acety
33	55.5	20.3	322	~	T23891	hypothetical prote
34	55.5	20.3	359	~	T19648 '	hypothetical prote
35	55.5	20.2	869	7	S24325	glucan 1,4-beta-gl
36	55.5	20.2	891	~	T30812	ubiquitin-protein
37	55.5	20.2	961	N	AD0548	puative autotransp
38	55	20.0	319	~	T43040	hypothetical prote
39	25	20.0	387	7	T24198	hypothetical prote
40	55	20.0	498	~	H85190	probable beta-amyl
41	55	20.0	548	~	T52556	beta-amylase (EC 3
42	55	20.0	826	Н	T02753	S-receptor kinase
43	54.5	19.8	189	7	B26659	T-cell receptor ga
44	54.5	19.8	205	~	B26425	T-cell receptor ga
45	54.5	19.8	213	7	T01715	hypothetical prote
					ALIGNMENTS	
RESULT 1 S71754						

```
Callular hepatitis A receptor HAVCr-1 precursor - green monkey
N.Alternate names: surface glycoprotein
C;Species: Cercopithecus acthiops (green monkey, grivet)
C;Date: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004
C;Accession: S7154
R;Kaplan, G; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M.
R;Kaplan, G; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M.
R;Kaplan, G; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M.
A;Reference number: S71754
A;Molecule type: mRNA
A;Residues: 1451 - KAAP
A;Residues: 1451 - KAAP
A;Residues: 1451 - KAAP
A;Residues: Julyoprotein
A;Experimental source: kidney
C;Keywords: slycoprotein
F;1-17/Domain: signal sequence #status predicted <SIG>F;1-17/Domain: signal sequence #status predicted <MAT>F;18-451/Product: cellular hepatitis A receptor HAVCr-1 #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          329 PLYSYTTDGSDTVTESSDGL#NNNQTQLSPEHSPQMVNTTEGIXAGVCISVL 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 82.9%; Score 228; DB 2; 1 Similarity 84.6%; Pred. No. 8.4e-20; 44; Conservative 2; Mismatches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Si
Matches 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

mitochondrial outer membrane protein TOM71 - yeast (Saccharomyces cerevisiae)

Miletrnate names: protein YMR117w
C;Species: Saccharcmyces cerevisiae
C;Species: Saccharcmyces cerevisiae
C;Species: Saccharcmyces cerevisiae
C;Date: 13-01-1995 #sequence_revision 10-Feb-1995 #text_change 09-Jul-2004
C;Accession: \$48959; \$52886
R;Latreille, P.
Submitted to the EMBL Data Library, May 1994
A;Description: The sequence of S. cerevisiae cosmid 8263.
A;Reference number: \$46676
A;Reference number: \$46676
A;Reference number: \$46676
A;References: UNIPROT: P38825; EMBL: U00059; NID: g529116; PIDN: AAB68868.1; PID: g529116
A;Residues: 1-639 <153 <1ATA;Cross-references: UNIPROT: P3825; EMBL: U00059; NID: g529116; PIDN: AAB68868.1; PID: g529116
A;Reference number: S62886; MUID: 96196584; PMID: 8612740
A;Reference number: S62886

7

Gaps

4

```
A;Cross-references: UNIPROT:Q09208; EMBL:Z48009; PIDN:CAA88083.1; GSPDB:GN00020; CESP:AH6
A;Experimental source: clone AH6
C;Genetics:
A;Gene: CESP:AH6.10
A;Gene: CESP:AH6.10
A;Map position: 2
A;Introns: 217/2; 279/3
C;Superfamily: Caenorhabditis elegans hypothetical protein AH6.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: DNA
A;Residues: 1-472 <DBL>
A;Cross-references: UNIPROT:P36758; EMBL:X74476; NID:g396989; PIDN:CAA52559.1; PID:g39699
C;Superfamily: papillomavirus L2 protein
C;Keywords: late protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Realdues: 1-402 <PRA
A;Cross-references: UNIPROT: Q23351; EMBL: U50310; PIDN: AAA92540.1; CESP: ZC487.1
A;Experimental source: strain Bristol N2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hypothetical protein ZC487.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T29478
R;Pauley, A.; Gattung, S.
submitted to the EMBL Data Library, February 1996
A;Description: The sequence of C. elegans cosmid ZC487.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S36519
L2 protein - human papillomavirus type 34
C;Species: human papillomavirus type 34
C;Species: human papillomavirus type 34
C;Species: human papillomavirus type 34
C;Accession: S36519
R;Delius, H.; Hofmann, B.
Submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human papillomavirus types.
A;Reference number: S36469
A;Reference number: S36469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 YTTDGND--TVTESSDGLWN-------NNQTQLFLEHSLLTANTTKGIYAGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Gene: CESP:ZC487.1
A;Introns: 7/2; 132/3; 165/3; 200/1; 244/3; 316/2
C;Superfamily: Caenorhabditis elegans hypothetical protein ZC487.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22.5%; Score 62; DB 2; Length 402; 30.9%; Pred. No. 9.1; tive 9; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22.5%; Score 62; DB 2; Length 472; 37.0%; Pred. No. 11; tive 4; Mismatches 25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGV 47
                                                                                                                                                                                                                                                  Query Match
22.5%; Score 62; DB 2; Length 329;
Best Local Similarity 43.8%; Pred. No. 7.2;
Matches 14; Conservative 5; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                      119 QTGLLIERAFATFATTYKTKKSVYIGVCISLI 150
                                                                                                                                                                                                                                                                                                                                                                                   25 QTQLFLEHSLLTANTT----KGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 30.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 37.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         239 ESFCIQVI 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48 ---CISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: T29478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proteinase related protein [imported] - Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Species: Sulfolobus solfataricus
C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
C;Accession: A90267
R;She, Q; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; ChanJong, I.; Jeffixes, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, F arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
A;Description: Sulfolobus solfataricus complete genome.
A;Reference number: A99139
A;Accession: A90267
                                                                                                                       A;Genome: nuclear
C;Superfamily: mitochondrial outer membrane protein, 70K; tetratricopeptide repeat homol
C;Superfamily: mitochondrial outer membrane; mitochondrian; transmembrane protein
F;Sey-corgs: mitochondrial outer membrane; mitochondrian; transmembrane protein
F;Se-119/Domain: tetratricopeptide repeat homology <TT03>
F;127-160/Domain: tetratricopeptide repeat homology <TT03>
F;141/Domain: tetratricopeptide repeat homology <TT05>
F;145-377/Domain: tetratricopeptide repeat homology <TT06>
F;146-479/Domain: tetratricopeptide repeat homology <TT07>
F;146-479/Domain: tetratricopeptide repeat homology <TT07>
F;1480-513/Domain: tetratricopeptide repeat homology <TT07>
F;1480-513/Domain: tetratricopeptide repeat homology <TT08>
F;564-597/Domain: tetratricopeptide repeat homology <TT09>
F;664-597/Domain: tetratricopeptide repeat homology <TT10>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:Q97Z06; GB:AE006641; NID:g13814328; PIDN:AAK41392.1; GSPDB:G
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;;
;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----NDTVTE-SSDGLWNNNQTQLFLEHSLLTANTTKGIYAG 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Apportetical protein AH6.10 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Accession: T18619
R;Berks, M.
Berks, M.
Berks, M.
A;Reference number: Z18998
A;Reference number: Z18998
A;Reference number: T18619
A;Reference preliminary; translated from GB/EMBL/DDBJ
A;Reference DNA
A;Residues: 1-329 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10; Mismatches 19; Indels 17; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305 LYSATDEGYLVANDLLTKSTD-------MYHSLLSANT 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LYSYTTDG----NDTVTESSDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22.7%; Score 62.5; DB 2; 29.2%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22.7%; Score 62.5; Di
40.5%; Pred. No. 13;
tive 6; Mismatches
                                                                A;Cross-references: SGD:S0001159; MIPS:YHR117w
A;Map position: 8R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 22.7%
Best Local Similarity 29.2%
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-1269 < KUR>
                                      A; Gene: SGD: TOM71; TOM72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1223 QLTNV 1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 SYTTDG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47 VCISV 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Gene: SSO1141
            Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
```

셤 ò 요

ઠ

g

47

Gaps

22;

ö

Gape

ö

```
Citinase VC1952 [imported] - Vibrio cholerae (strain N16961 serogroup O1)
C;Species: Vibrio cholerae
C;Date: 18-May-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C;Accesion: C82135
R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R.J.;
N.R.; Makalanos, J.J.; Vanathevan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers, P.
Nature 406, 477-483, 2000
A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae.
A;Reference number: A820135
A;Attus: preliminary
A;Accession: C82135
A;Status: preliminary
A;Rocession: C82135
A;Redeuse: L946 chr.
A;Residues: 1-846 chr.
A;Residues: URIPROT: Q9KQP6; GB:AE004271; GB:AE003852; NID:g9656490; PIDN:AAF95100
A;Experimental source: serogroup O1; strain N16961; biotype E1 Tor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              structural polyprotein - Venezuelan equine encephalitis virus (subtype II, strain Evergle N;Contains: 6K protein; coat protein; membrane glycoprotein E1; membrane glycoprotein E2; C;Species: Venezuelan equine encephalitis virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribolotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissenbach, J.; Ehrlic
Genome Res. 11, 731-753, 2001
A;Title: The Complete genome sequence of the lactic acid bacterium Lactococcus lactis ssg
A;Reference number: A86625; MUID:21235186; PMID:11337471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:Q9CFT4; GB:AE005176; PID:g12724367; PIDN:AAK05479.1; GSPDB:GA
A;Experimental source: strain IL1403
                                                                                                                                                                                                                                                                                                                                                                                                     prophage pi3 protein 07 [imported] - Lactococcus lactis subap. lactis (strain IL1403)
C;Species: Lactococcus lactis subap. lactis
C;Date: 23-Mar-2001 #sequence_revision 23-Mar-2001 #text_change 09-Jul-2004
                                                                                  ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
7
                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54 YWTQGNDPVTHS--GQWDAWQILGQCDGGANNPPQVSIQSPLNNAKIPQGSVVGL 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5 YTTDGNDTVTESSDGLWN------NNQTQLFLEHSLLTANTTKGIYAGV 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 YSYTTDGNDTVTESSDGL-----WNNNQTQLFLEHSLLTANT-TKGIYAGVC
                  Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 59; DB 2; Length 846;
Pred. No. 49;
6; Mismatches 18; Indels
                                                                                                                                                                                               46 YSY-TDAN----KSKGIVWNENTLMEYLENPKKYIPGTKMIFAGI 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                     3 YSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21;
              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21.6%; Score 59.5; DB 2; 28.3%; Pred. No. 24; tive 10; Mismatches 21;
           Score 59.5; DI
Pred. No. 3.9;
                                                                              6; Mismatches
       Query Match 21.6%;
Best Local Similarity 37.8%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21.5%;
30.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 30.9
ses 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
hes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Residues: 1-520 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accession: B86797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: E86797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Map position: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: pi307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J01978
                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A/Contents: annotation; X-ray crystallography, oxidized form, 2.8 angstroms
R;Mandel, N.; Mandel, G.; Trus, B.L.; Rosenburg, J.; Carlson, G.; Dickerson, R.E.
J Biol. Chem. 252, 4619-4636, 1977
A;Title: Tuna cytochrome c at 2.0 A resolution. III. Coordinate optimization and compari
A;Title: Tuna cytochrome c at 2.0 A resolution. III. Coordinate optimization and compari
A;Reference number: A38038; MUID:77207068; PMID:194885
A;Contents: annotation; commercial Scombridae, X-ray crystallography, oxidized and reduc
A;Note: this is the final paper in a series
C;Superfamily: cytochrome c; cytochrome c homology
C;Keywords: acetylated amino end; chromoprotein; electron transfer; heme; iron; metallography and comparint cytochrome c homology cCrc.
F;1/Modified site: acetylated amino end (01y) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytochrome c [validated] - skipjack tuna
Cispecies: Buthynnus pelamis, Katsuwonus pelamis (skipjack tuna)
Cispecies: Buthynnus pelamis, Katsuwonus pelamis (skipjack tuna)
Cispecies: 13-Jul-1981 #sequence_revision 10-Oct-1997 #text_change 09-Jul-2004
Ciscession: A60022
Rinakayama, T.; Titani, K.; Narita, K.
Biochem. 70, 311-326, 1971
A;Title: The amino acid sequence of cytochrome c from bonito (Katsuwonus pelamis, Linnae A;Reference number: A00022; MUID:72003272; PMID:5106585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R; Tanaka, N.; Yamane, T.; Taukihara, T.; Ashida, T.; Kakudo, M.
submitted to the Brookhaven Protein Data Bank, August 1976
A; Reference number: ASO107; PDB1-1CYC
A; Contents: annotation; X-ray crystallography, 2.3 angstroms, residues 1-103
R; Tanaka, N.; Yamane, T.; Tsukihara, T.; Ashida, T.; Kakudo, M.
D; Biochem. 77, 147-162, 1975
A; Title: The crystal structure of bonito (katsuo) ferrocytochrome c at 2.3 A resolution. A; Reference number: A38036; MUID:75170243; PMID:166072
A; Contents: annotation; X-ray crystallography, reduced form, 2.3 angstroms
R; Matsuura, Y; Hata, Y; Yamaguchi, T.; Tanaka, N.; Kakudo, M.
J; Blochem. 85, 729-777, 1979
A; Title: Structure of bonito heart ferricytochrome c and some remarks on molecular inter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: UNIPROT:Q05199; GB:L11264; NID:g212603; PIDN:AAA49037.1; PID:g212604
                                                                                                                                                                                                              acetylcholine receptor synthesis stimulator ARIA-1 precursor - chicken C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Date: 20-Reb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
C;Accession: A45569
R;Falls, D.L.; Rosen, K.M.; Corfas, G.; Lane, W.S.; Fischbach, G.D.
Cell 72, 801-815, 1993
A;Title: ARIA, a protein that stimulates acetylcholine receptor synthesis, is a member A;Reference number: A45769; MUID:93201602; PMID:8453670
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;14,17/Binding site: heme (Cys) (covalent) #status experimental
F;18,80/Binding site: heme iron (His, Met) (axial ligands) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Noče: sequence extracted from NCBI backbone (NCBIN:127787, NCBIP:127788)
C;Superfamily: human heregulin; BGF homology; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
Query Match
21.8%; Score 60; DB 2; Length 602;
Best Local Similarity 31.7%; Pred. No. 25;
Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-references: UNIPROT: P00025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: mRNA; protein A;Residues: 1-602 <FAL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Experimental source: brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecule type: protein
Residues: 1-103 <NAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Accession: A00022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

3;

```
structural polyprotein - Venezuelan equine encephalitis virus (strain TC-83)
N;Contains: 6K peptide; coat protein; membrane glycoprotein E1; membrane glycoprotein E2;
C;Species: Venezuelan equine encephalitis virus
C;Accession: A27891
R;Johnson, B.J.B.; Kinney, R.M.; Kost, C.L.; Trent, D.W.
J. Gen. Virol. 67, 1951-1960, 1986
A;Title: Molecular determinants of alphavirus neurovirulence: nucleotide and deduced prot
A;Reference number: A27871; MUID:86306669; PMID:3755750
A,Title: A novel M-3 muscarinic acetylcholine receptor is expressed in chick atrium and 1 A,Reference number: A55019, MUID:95014393; PMID:7929287
A,Accession: A55019
A,Accession: A55019
A,Status: preliminary
A,Molecule type: mRNA
A,Residues: 1-639 cGAD-A,Cross-references: UNIPROT:P49578; GB:L10617; NID:9530097; PIDN:AAA65961.1; PID:9530098
C,Superfamily: vertebrate rhodopsin
C,Keywords: neurotransmitter receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-1254 «KII.»
A;Cross-references: UNIRROT:P09592; GB:J04332; NID:G323708; PIDN:AAB02519.1; PID:G323710
R;Kinney, R.M.; Johnson, B.J.B.; Brown, V.L.; Trent, D.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-124 <-00Hs
A; Residues: 1-124 <-00Hs
A; Residues: 1-124 <-00Hs
A; Cross-references: UNIPROT: P05674; GB: X04368; NID: 958621; PIDN: CAAA7883.1; PID: 958622
A; Note: the authors translated the codon UUC for residues 19 and 27 as Ile and ACC for 10; Superfamily: togavirus structural polyprotein
C; Superfamily: togavirus structural polyprotein
C; Keywords: coat protein #status predicted <-00P.
F; 7-276/Product: coat protein #status predicted <-00P.
F; 776-334/Product: membrane glycoprotein E2 #status predicted <-00P.
F; 777-757/Product: membrane glycoprotein E2 #status predicted <-00P.
F; 788-812/Product: coat protein #status predicted <-00P.
F; 788-812/Product: coat protein #status predicted <-00P.
F; 774-790/Domain: transmembrane #status predicted <-00P.
F; 712-808/Domain: transmembrane #status predicted <-00P.
F; 813-1254/Product: membrane glycoprotein E1 #status predicted <-00P.
F; 1231-1247/Domain: transmembrane #status predicted <-00P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  structural polyprotein - Venezuelan equine encephalitis virus (strain TRD)
N;Contains: 6K protein; coat protein; membrane glycoprotein E1; membrane glycoprotein I
C;Species: Venezuelan equine encephalitis virus
C;Species: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004
C;Accession: B31467; A47612
R;Kinney, R.M.; Johnson, B.J.B.; Welch, J.B.; Tsuchiya, K.R.; Trent, D.W.
Virology 170, 19-30, 1989
A;Title: The full-length nucleotide sequences of the virulent Trinidad donkey strain of A;Reference number: A31467; MUID:89243175; PMID:2524126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21.1%; Score 58; DB 1; Length 1254; 47.6%; Pred. No. 1e+02; ive 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372 TDQGDQEHSSSDS-WNNDAAASLENSASSDEEDITAE-TRAIYS 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 TDGNDTVTESSDGLWNNNQTQLFLEHSL-----LTANTTKGIYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 58; DB Pred. No. 47; 4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           :| || || || || || || 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21.1%;
ilarity 40.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 47.6
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
C;Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 09-Jul-2004
C;Accession: JQ1978
R;Sneider, J.M.; Kinney, R.M.; Tsuchiya, K.R.; Trent, D.W.
J, Gen. Virol. 74, 519-523, 1993
A;Title: Molecular evidence that epizootic Venezuelan equine encephalitis (VEB) I-AB vir A;Reference number: JQ1978; MUID:93187617; PMID:8445371
                                                                                                                                                                                                                                                                                                                                         A Molecule type: mRNA
A Molecule type: mRNA
A Mesidues: 1-1234 «SMB.
C Superfamily: togavirus structural polyprotein
C Keywords: coat protein Hatatus predicted, cTP.
C Keywords: coat protein Hatatus predicted «CTP.
C Mesywords: coat protein Hatatus predicted «CTP.
C Mesyword: membrane glycoprotein E2 Hatatus predicted «MG2.
C MG2.
C MG2.
C MG3.
C MG4.
C MG3.
C MG4.
C 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Residues: 1-321 <WIL>
A;Cross-references: UNIPROT:Q9NET3; EMBL:AL132896; NID:g6434440; PIDN:CAB60932.1; PID:g6
A;Experimental source: clone Y39B6B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein Y39B6B.aa [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 09-Jul-2004
C;Accession: T45653
R;Wilson, R.; Ainscough, R.; Anderson, K.; Baynes, C.; Berks, M.; Bonfield, J.; Burton, raser, A.; Fulton, L.; Gardner, A.; Green, P.; Hawkins, T.; Hillier, L.; Jier, M.; Johns
B.; O'Callaghan, M.; Parsons, J.; Percy, C.; Rifken, L.; Roopra, A.; Saunders, D.
Nature 368, 32-38, 1994
A;Authors: Shownkeen, R.; Sims, M.; Smaldon, N.; Smith, A.; Smith, M.; Sonnhammer, E.; S
A;Authors: Who f contiguous nucleotide sequence from chromosome III of C. elegans.
A;Reference number: 843531; MUID:94150718; PMID:7906398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     muscarinic acetylcholine receptor, M3 isoform - chicken
C;Species: Gallus gallus (chicken)
C;Bate: 11-Nov-1994 #sequence_revision 11-Nov-1994 #text_change 09-Jul-2004
C;Accession: A55019
R;Gadbut, A.P.; Galper J.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Indels 12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LYSYTTDGNDTVTESSD----GLWNNNQTQLFLEHSLLTANTTKGIYAGVCISV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 59; DB 1; Length 1254;
Pred. No. 77;
3; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 21.1%; Score 58; DB 2; Length 321; Best Local Similarity 27.8%; Pred. No. 21; Matches 15; Conservative 13; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Map position: 3
A;Introns: 41/2; 95/2; 131/1; 170/3; 208/1; 236/2; 279/3
A;Note: Y39B6B.aa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Accession: T45053
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 DIVTESSDGLWNNNQ----TQLFLEHSLLTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 45.5
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

ř

E2;

ö

ŏ

```
Virology 152, 400-413, 1986

A,Title: Nucleotide sequence of the 26 S mRNA of the virulent Trinidad donkey strain of A,Reference number: A47612; MUD:86263392; PMID:3088830

A,Recession: A47612

A,Molecule type: mRNA
A,Residues: 1-542, 7K',544-810, 'P',812-1254 «KI2>
A,GCCOSG-references: GB:L01442
C,Superfamily: togavirus structural polyprotein
C,Keywords: coat protein; glycoprotein; polyprotein; transmembrane protein
F;1-275/Product: membrane glycoprotein B3 #status predicted «MG2>
F;276-334/Product: membrane glycoprotein B2 #status predicted «MG2>
F;355-757/Product: membrane glycoprotein B2 #status predicted «MG2>
F;776-314/Product: membrane #status predicted «TM2>
F;758-812/Product: K protein #status predicted «TM2>
F;758-813/Pondain: transmembrane #status predicted «TM2>
F;758-813/Pondain: transmembrane #status predicted «TM2>
F;795-813/Product: membrane glycoprotein B1 #status predicted «TM3>
F;195-813/Pondain: transmembrane #status predicted «TM4>
F;195-813/Pondain: transmembrane #status predicted «TM4>
F;195-813/Pondain: transmembrane #status predicted «TM4>
F;1231-1248/Domain: transmembrane #status predicted «TM4>
F;1241-1248/Domain: transmembrane #status predicted «TM4>
F;1241-1248/Domain: transmembrane #st
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 21.1%; Score 58; DB 1; Length 1254; Best Local Similarity 47.6%; Pred. No. 1e+02; Matches 10; Conservative 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

Search completed: June 29, 2005, 08:58:15 Job time : 5.69941 secs

158 BTTWESLDHLWNNNQQMFWIQ 778

a

THIS PLOT BLANK IS TO SERVE OF THE PARTY OF

Sequence 21, Appl Sequence 21, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 28, Appl Sequence 39, Appl Sequence 11, Appl Sequence 11, Appl Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 14, Appl Sequence 15,
US-10-188-012-23 US-10-663-497-21 US-10-663-497-21 US-10-188-012-25 US-10-188-012-25 US-10-188-012-27 US-10-663-497-27 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-6 US-10-391-939A-3 US-10-193-17-50 US-10-193-17-50 US-10-188-012-1 US-10-188-012-1 US-10-188-012-7 US-10-188-012-15 US-10-188-012-15 US-10-188-012-13 US-10-188-012-13 US-10-188-012-13 US-10-188-012-13

Wed

```
1666
1655.5
1655.5
1655.5
1643.5
1643.5
                                                                                                                 367.5
367.5
367.5
366.5
366.5
 17, Appl
302, App
64, Appl
4, Appli
17, Appl
8, Appli
25, Appli
19, Appli
19, Appli
                                                                           June 29, 2005, 08:58:20 ; Search time 209.324 Seconds (without alignments) 613.589 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                     1749
1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRB 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1
Sequence 3
Sequence 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                Published Applications AA:*

| cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
            version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-655-506-7
US-10-718-321-7
US-10-188-321-7
US-10-295-012-302
US-10-188-332-64
US-10-319-939A-4
US-10-663-497-17
US-10-718-321-8
US-10-188-012-19
US-10-188-012-19
                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                          1717557 seqs, 384547976 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                       protein search, using sw model
                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
          GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7115
7115
717
717
717
717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                          US-10-718-321-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1749
1749
1684
1684
1684
1684
1684
1684
1684
                                                       OM protein -
                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                        Database
                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 4 4 9 4 9 1 1 1 1 0 9 1 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š.
```

Sequence 138, App

ALIGNMENTS

Sequence 33, Sequence 33, Sequence 35, Sequence 35,

```
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
CORRENT SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/655,506
FILING DATE: 04-Sep-2003
CLASSIFTCATION: cUnknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970
FILING DATE: 23-Nov-1998
APPLICATION NUMBER: US/0918,228
FILING DATE: 24-MAY-1996
                                                                                                                                                                                                                                                       TISSUE REGENERATION
                                                                                                                      JOSEPH V. BONVENTER

Gatherine A. Hession
Takaharu Ichimura
Henry Wei
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TI
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
US-10-655-506-7
; Sequence 7, Application US/10655506
; Publication No. US20050089868A1
; GENERAL INFORMATION:
; APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 02142
COMPUTER READABLE FORM:
```

Sequence 1 Sequence 1 Sequence 2 Sequence 2 Sequence 1

```
RESULT 3
US-10-188-012-17
                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 SLEIVPPKVTTTPIVTTVPTVTVTVRTSTTVPTTTTTVPTTTTVPTTMTVF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITSVPITISIPITISVPVITIVSTFVPPMPLPRONHEPVATSPSSPOPAETHPITLOGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITSVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                          100.0%; Score 1749; DB 17; Length 334; 100.0%; Pred. No. 1.5e-113; tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bonventre, Joseph
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Shedding of KIM-1
FILE REPERENCE: A124 US
CURRENT APPLICATION NUMBER: US/10/718,321
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/29549
PRIOR PELICATION NUMBER: 60/29549
PRIOR PELICATION NUMBER: 60/29549
PRIOR PELICATION NUMBER: 60/29549
PRIOR PELICATION NUMBER: 60/29549
PRIOR PELING DATE: 2001-06-01
PRIOR PILING DATE: 2001-06-04
PRIOR PELING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                 NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REGISTRATION NUMBER: 36,010
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 679-2810
TELEPHONE: (617) 679-2838
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                   LENGTH: 334 amino acids
TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 7, Application US/10718321; Publication No. US20050112117A1; GENERAL INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 334; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo Sapiens
US-10-718-321-7
                                                                                                                                                                                                                                                                                                US-10-655-506-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                    61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                           181 TITSVPITISIPITITSVPUTITVSTFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                         61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                               TITSVPTITSIPITISVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MHPQVVILSLILHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 SLEIVPPKVTTTPIVTTVPTVTTVRTSŢŢVPTTŢŢVPTTTTVPTTTMSIPTTTTVPŢTTMTVS
                                                                                            1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                     Gaps
                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
       Length 334;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.3%; Score 1684; DB 14; Length 359;
100.0%; Pred. No. 5.2e-109;
tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ministry, Jennifer Jones
APPLICANT: Umetsu, Dale T.
APPLICANT: Umetsu, Dale T.
APPLICANT: Dekruff, Rosemarie
APPLICANT: Ekruff, Rosemarie
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: T Cell Regulatory
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT PILING DATE: 2002-07-01
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR FILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH: 359
                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĕ
       DB 17;
; Score 1749; DB 17;
; Pred. No. 1.5e-113;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 17, Application US/10188012; Publication No. US20030124114A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:

NAME/KEY: VARIANT
LOCATION: (1)...(360)
CTHER INFORMATION: TIM-1 allele 1
US-10-188-012-17
    100.0%;
100.0%;
Query Match
Best Local Similarity 100.
Matches 334; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

240 240

180

ઠે

```
APPLICANT: Aziz, Natasha
APPLICANT: Aziz, Natasha
APPLICANT: Bos Biotechnology, Inc.
APPLICANT: Bos Biotechnology, Inc.
TITLE OF INVENTION: methods of Diagnosis of Bladder
TITLE OF INVENTION: and Methods of Screening for Modulators of Bladder
TITLE OF INVENTION: and Methods of Screening for Modulators of Bladder
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: UNMER: US/10/188,832
CURRENT APPLICATION NUMBER: US 60/302,814
PRIOR APPLICATION NUMBER: US 60/310,099
PRIOR APPLICATION NUMBER: US 60/310,099
PRIOR PILING DATE: 2001-08-03
PRIOR FILING DATE: 2001-11-08
PRIOR FILING DATE: 2001-11-13
SPRIOR FILING DATE: 2002-04-12
NUMBER OF SEQ ID NOS: 207
SEQ ID NO 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                 241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                             241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                           1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITSVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVAISPSSSPQPAETHPITLQGA
                                                                                                                                                         181 TITSVPITISIPITISVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
                                                                                                                                                                                        181 TTTSVPTTTSIPTTTSTPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IVWINGTHVITYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 TITSVPITISIPTITSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.3%; Score 1684; DB 15;
ilarity 100.0%; Pred. No. 5.2e-109;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                        301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                     301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 64, Application US/10188832; Publication No. US20040076955A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 323; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-188-832-64
                                                     121
                                                                                         g
                                                                                                                                           õ
                                                                                                                                                                                                 -A
                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                  ઠે
                                                                                                                                   IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                               61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MHPQVVILSLILHIADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Afar, Daniel
APPLICANT: Afar, Daniel
APPLICANT: Afar, Daniel
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Glyne, Richard
APPLICANT: Glyne, Richard
APPLICANT: Hevezi, Peter A.
APPLICANT: Hevezi, Peter A.
APPLICANT: Macso, Susan R.
APPLICANT: Marson, Susan R.
APPLICANT: Bos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
CURRENT FILING DATE: 2000-09-15
PRIOR PILING DATE: 2000-11-13
PRIOR PILING DATE: 2001-11-15
PRIOR FILING DATE: 2001-11-15
PRIOR FILING DATE: 2001-11-15
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-24
PRIOR FILING DATE: 2001-11-24
PRIOR PILING DATE: 2001-10-8
PRIOR PILING DATE: 2001-08
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-02-13
                                                                   181 TITSVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVAISPSSPQPAETHPITILQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.3%; Score 1684; DB 15; Length 359; 100.0%; Pred. No. 5.2e-109; ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                        VLLALLGVIJAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 302, Application US/10295027
Publication No. US20030232350A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.4
Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-295-027-302
                                                                                                                                   241
                                                                                                                                                                                                                                        301
                           181
                                                                   엄
                                                                                                                             ઠે
                                                                                                                                                                       셤
                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

ö

120 120

9 9

180 240 240

요

g

ઠે

```
61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
               APPLICANT: Rosemarie Dekruyff
APPLICANT: Jennifer McIntire
APPLICANT: Jennifer McIntire
APPLICANT: Gordon Preema
TITLE OF INVENTION: TELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: IMMUNE DISEASE
FILE REPRENCE: STAN-235CTP
CURRENT APPLICATION NUMBER: US/10/663,497
CURRENT FILING DATE: 2003-09-15
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR APPLICATION NUMBER: 10/188,012
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2002-07-01
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 4.0
IENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/10718321

Publication No. US20050112117A1

GENERAL INFORMATION:

APPLICANT: Biogen Idec Ma Inc.

APPLICANT: Bailly, Veronique

APPLICANT: Benventre, Joseph

APPLICANT: The General Hospital Corporation

TITLE OF INVENTION: Molecules and Methods for Inhibiting

TITLE OF INVENTION: Molecules and Methods for Inhibiting

TITLE OF INVENTION: Molecules and Methods for Inhibiting

CURRENT APPLICATION NUMBER: US/10/718,321

CURRENT PILING DATE: 2003-11-20

PRIOR APPLICATION NUMBER: 60/295449

PRIOR PILING DATE: 2001-06-01

PRIOR PILING DATE: 2001-06-04

PRIOR PILING DATE: 2001-06-04

PRIOR PILING DATE: 2001-06-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96.3%; Score 1684; DB 17;
100.0%; Pred. No. 5.2e-109;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 VLLALLGVIJAKKYFFKKEVOOL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; NAME/KEY: VARIANT
; LOCATION: (1)...(360)
; OTHER INFORMATION: TIM-1 allele 1
US-10-663-497-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                           APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Loic;
APPLICANT: Giot, Xiaojia Sasha;
APPLICANT: Lepley, Denise M.;
APPLICANT: Meari, Mehdi;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Jan-Fai
APPLICANT: Starling, Jan-Fai
APPLICANT: Starling, Gary;
APPLICANT: Starling, Jan-Fai
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICATION NUMBER: 60/365,491
PRIOR PPLICATION NUMBER: 60/365,491
PRIOR PPLING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 IVWINGTHVIYYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKIIV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTKSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MHPQVVILSLILHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96.3%; Score 1684; DB 17;
100.0%; Pred. No. 5.2e-109;
rative 0; Mismatches 0;
                                                                               301 VLLALLGVIIAKKYFFKKEVQQL 323
                                               301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 17, Application US/10663497
; Publication No. US20050095593A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                      Sequence 4, Application US/10391939A Publication No. US20050014687A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CuraSeqList version 0.1
                                                                                                                                                                                                                                                                                                   APPLICANT: Anderson, David W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity ..... Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Curs
SEQ ID NO 4
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-391-939A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
```

임

ò ద g

ò

ઠે 셤 g ð

ઠે

ö

ઠે g ò g δ 셤 δ 셤 ઠે g

```
ö
                                                                                                                                                              240
                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                          300
                                                                                                                                                                                                                                 241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITSVPITITSIPITITSVPVITAVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA 240
                                                                     121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTVPTTTWPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                           181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                    TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRONHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                        241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTTVPTTTMSIPTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITSVPITISI PITISVPVITIVSI FVPPMPL PRONHE PVATSPSSPQPAETH PITLOGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 96.0%; Score 1679; DB 14; Length 359; Best Local Similarity 99.7%; Pred. No. 1.2e-108; Matches 322; Conservative 0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: MUMELLE, Dale T.
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Exchroo, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT APPLICATION NUMBER: 60/302,344
PRIOR PILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PastSEQ for Windows Version 4.0
LENGTH: 359
                                                                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: VARIANT
LOCATION: (1) ... (359)
OTHER INFORMATION: TIM-1, allele 2
US-10-188-012-19
                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
US-10-188-012-19
; Sequence 19, Application US/10188012
; Publication No. US20030124114A1
; GENERAL INFORMATION:
; APPLICANT: McIntire, Jennifer Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                              121
                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                              셤
                                                                                                               ठ
                                                                                                                                                g
                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wyeth
APPLICANT: Be, Xiaobing
APPLICANT: Liu, Weth
APPLICANT: Liu, Weth
APPLICANT: Liu, Weth
APPLICANT: Liu, Weth
APPLICANT: Liu, Wes, Steve
TILE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
FILE REFERENCE: 031896-026000 (AM101264)
CURRENT APPLICATION NUMBER: US/10/847,918
CURRENT APPLICATION NUMBER: US 60/471,729
PRIOR PILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
SCOTTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                      61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTWSIPTTTVPTTWFT380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITSVPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPITIQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWINGTHVTYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                       1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                              1 MHPQVVILSLILHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MHPQVV1LSL1LHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCONG
                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 96.3%; Score 1684; DB 17; Length 359; Best Local Similarity 100.0%; Pred. No. 5.2e-109; Matches 323; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                        DB 17; Length 359;
                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                     96.3%; Score 1684; DB 17;
100.0%; Pred. No. 5.2e-109;
vative 0; Mismatches 0;
PRIOR FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VLLALLGVI IAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 25, Application US/10847918; Publication No. US20050119210A1; GENERAL INFORMATION:
                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 323; Conservative
                                                                                                             TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LENGTH: 359
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-847-918-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-847-918-25
                                                                                                                                                           US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
```

δ g 셤

ò 셤

ò

ö

셤

```
61 IVWINGTHVIYYKKDIRYKLLGDLSRRDVSLTIENIAVSDSGVXCCRVEHRGWFNDMKIIV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 TTTSVPTTTSIPTTTSVPVTTSVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 IRREPISSPLYSYTTDGNDTVTESSDGLWSNNQTQLFLEHSLLTANTTKGIXAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-663-497-23

US-10-663-497-23

Sequence 23, Application US/10663497

Sequence 23, Application US/10663497

Sequence 23, Application US/10663497

Sequence 24, Application No. US2005009553A1

GENERAL INFORMATION:

APPLICANT: Date Umetsu

APPLICANT: Gordon Freeman

TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH

TITLE OF INVENTION: T WIMUNE DISEASE

FILE REFERENCE: STAN-235CIP

CURRENT FILING DATE: 2003-09-15

PRIOR APPLICATION NUMBER: US/10/663,497

CURRENT FILING DATE: 2003-09-15

PRIOR APPLICATION NUMBER: 00/302,344

PRIOR PILING DATE: 2002-07-01

NUMBER OF SEQ ID NOS: 40

SEQ ID NO 23

LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.5%; Score 1671; DB 14; Length 359; 99.1%; Pred. No. 4.2e-108; tive 2; Mismatches 1; Indels 0
TITLE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT FILING DATE: 2002-07-01
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR FILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SEQ ID NO 236
SEQ ID NO 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: H. sapiens
FRATURE:
NAME/KEY: VARIANT
LOCATION: (1)...(359)
OTHER INFORMATION: TIM-1, allele 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best_Local Similarity 99.1 Matches 320; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: H. sapiens
FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-188-012-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIXAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 IVWTINGTHVITYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTWPTTWSIPTTTVPTTWTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 SLEIVPPKVITTPIVITVPTVTTVRTSTTVPTTTTVPTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCMNRGSCSLFTCQNG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                             APPLICANT: Rosemarie Dekruyff
APPLICANT: Rosemarie Dekruyff
APPLICANT: Rosemarie Dekruyff
APPLICANT: Gordon Freeman
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: IMMUNE DISEASE
FILE REFERENCE: STAN-235CIP
CURRENT APPLICATION NUMBER: US/10/663,497
CURRENT FILING DATE: 2003-09-15
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2002-07-01
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FASELEGG for Windows Version 4.0
SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 96.0%; Score 1679; DB 17; Length 359; Best Local Similarity 99.7%; Pred. No. 1.2e-108; Matches 322; Conservative 0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-188-012-23
Sequence 23, Application US/10188012
Publican No. US20030124114A1
GENERAL INFORMATION:
APPLICANT: McIntire, Jennifer Jones
APPLICANT: Umetsu, Dale T.
APPLICANT: Cuchroo, Vijay
APPLICANT: Freeman, Goordon J.
APPLICANT: Freeman, Goordon J.
IIILE OF INVENTION: T Cell Regulatory Genes and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQL 323
           301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: VARIANT
; LOCATION: (1)...(359)
; OTHER INFORMATION: TIM-1, allele 2
US-10-663-497-19
                                                                                                                                       Sequence 19, Application US/10663497; Publication No. US20050095593A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 359
TYPE: PRT
ORGANISM: H. sapiens
                                                                                        RESULT 11
US-10-663-497-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
```

g ð g 8 g 8 g ò 셤 Š 원

셤

ò

a ઠે 엄

ઠે

셤

ò

a ઠે 원

ሯ

```
234
                                                                                                                                                                                                                294
                                                                                                                                                                                                                                         241 TTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLPLEHSLLTANTTKGIYAG 300
                                                                        121 SLEIVPPKVTTTPIVTTVPTTVRTSTTVPTTTTVPMTTTVPTTTVPTTMSIPTTTVP 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 IVWTNGTHYTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SLEIVPPKVTTTPIVTTVPTVVTVVTSTTVPTTTVPMTTTVPTTTVPTTWSTPTTTVP 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TILQGAIRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAG 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPT-----TTTVPTTTVPTTMSIPTTTVP 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIMIVSTITISVPITISIPTITSVPVTITVSTFVPPMPLPRONHEPVAISPSSPOPAETHP 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MHPQVVILSLILHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG 60
                                                                                                                                                 181 TIMIVSTITSVPITITSIPITITSVPVITAVSTFVPPMPLPRQNHEPVATSPSSPQPAETHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTVPTTTVPTTMSIPTTTVP
                                                                                                                    TIMIVSTITISVPITITS! PITITSVPVITITVSTFVPPMPLPRQNHEPVATSPSSPQPAETHP
                                                                                                                                                                                                                TTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MHPOVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21, Application US/10663497

Sequence 21, Application US/10663497

Publication No. US2005095593A1

GENERAL INFORMATION:

APPLICANT: Dale Umetsu

APPLICANT: Dale Umetsu

APPLICANT: Jennifer McIntire

APPLICANT: Gendon Freeman

TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH

TITLE OF INVENTION: IMMUNE DISEASE

TITLE OF INVENTION: IMMUNE DISEASE

FILE REFERENCE: STAN-235GIP

CURRENT FILING DATE: 2003-09-15

PRIOR PELLON NUMBER: 10/108,012

PRIOR APPLICATION NUMBER: 10/108,012

PRIOR APPLICATION NUMBER: 10/108,012

PRIOR APPLICATION NUMBER: 10/108,012

PRIOR APPLICATION NUMBER: 10/108,012

SERIOR POSEQ ID NOS: 40

SOFTWARE: PARESE OF SEQ ID NOS: 40

SEQ ID NO 21

LENGTH A. 0. 21

LENGTH A. 0. 21

LENGTH A. 0. 21

LENGTH A. 0. 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 95.3%; Score 1666; DB 17;
Best Local Similarity 97.9%; Pred. No. 9.4e-108;
Matches 322; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                             295 VCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                     301 VCISVLVLLALLGVIIAKKYFFKKEVQQL 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295 VCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i LOCATION: (1)...(365)
i OTHER INFORMATION: TIM-1, allele 3
US-10-663-497-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 365
                                                                                                                       175
                                                                                                                                                                                                                235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  235
                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE
                                                                 셤
                                                                                                                       ઠે
                                                                                                                                                      g
                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                          61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 IRREPISSPLYSYTTDGNDTVTESSDGLMSNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                           9
                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                   1 MHPQVVILSLILHIADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                    181 TTTSVPTTTSIPTTTSVPVTTSVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                  61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                              SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTWSIPTTTVPTTMSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITSVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                        MHPQVV1LSL1LHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCONG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MHPQVV1LSL1LHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                 Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95.3%; Score 1666; DB 14; Length 365; 97.9%; Pred. No. 9.4e-108; tive 0; Mismatches 1; Indels 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Umeteu, Dale T.
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Technon, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: Use Thereof
TITLE OF INVENTION: Use Thereof
FILE REPERENCE: STAN.235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT APPLICATION NUMBER: 60/302,344
PRIOR PILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 21
LENGTH: 365
                                                                                                                                            Indels
                                                                                            Query Match 95.5%; Score 1671; DB 17;
Best Local Similarity 99.1%; Pred. No. 4.2e-108;
Matches 320; Conservative 2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: McIntire, Jennifer Jones APPLICANT: Umetsu, Dale T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LOCATION: (1)...(365)
; OTHER INFORMATION: TIM-1, allele 3
US-10-188-012-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 21, Application US/10188012; Publication No. US20030124114A1; GENERAL INFORMATION:
; LOCATION: (1)...(359)
; OTHER INFORMATION: TIM-1, allele US-10-663-497-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 97.9°
Matches 322; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-188-012-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
```

ä

a ઠે

ò

Wed Jun 29 15:40:47 2005

g

301 VCISVLVLLALLGVIIAKKYFFKKEVQQL 329

Search completed: June 29, 2005, 09:33:01 Job time: 210.324 secs

```
LENGTH: 334 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-197-970B-7
                                                            Sequence 3, Applisequence 4, Applisequence 341, Applisequence 3, Applisequence 4, Applisequence 5, Applisequence 6, Applisequence 6, Applisequence 6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7, Appli
2, Appli
3, Appli
9, Appli
10, Appli
                                                                                                              June 29, 2005, 08:57:16 ; Search time 45.9332 Seconds (without alignments) 542.805 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9, Ag
Sequence 10, A
Sequence 10, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 10,
Sequence 10,
Sequence 24,
Sequence 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10,
Sequence 10,
Sequence 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24,
                                                                                                                                                                                                                                     1 MHPQVVILSLILHLADSVAG......PFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Issued Patents AA:*

(cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
(cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-197-970B-7
PCT-083-287-001A-2
US-08-287-001A-2
US-09-197-970B-3
US-08-487-746A-10
US-08-480-7746A-10
US-08-480-776-10
US-08-9310-367-10
US-09-310-367-10
US-09-310-367-10
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-24
US-09-310-367-34
US-09-310-367-34
US-09-310-367-34
US-09-103-429A-3
US-09-103-429A-3
US-09-103-429A-3
US-09-103-429A-3
US-09-103-429A-3
US-09-216-393B-344
US-08-700-651-6
                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                        513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                           OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                              US-10-718-321-7
1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                  Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ........
                                                                                                                                                                                                                   Perfect score:
                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
```

```
5, Appli
1258, Appli
27, Appli
27, Appli
8, Appli
12, Appli
17, Appli
17, Appli
18, Appli
18, Appli
18, Appli
18, Appli
18, Appli
10, Appli
11, Appli
11, Appli
11, Appli
12, Appli
12, Appli
12, Appli
15, Appli
16, Appli
17, Appli
18, Appli
11, Ap
                                                                                                                                                                        Sequence (Sequence (Sequen
                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER KEADABLE FOURTH

WEDDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US 60/018,228

FILING DATE: 24-MAY-1996

ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER: 35,245

REGISTRATION NUMBER: 35,245

TELEPRATION INFORMATION:

TELEPRATION INFORMATION:

TELEPRATION (617) 679-2818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Henry Wei
Richard L. Cate
NUMBER OF INVENTION: MODULATORS OF TISSUB RECENERATION
CORRESPONDENCES:
ADDRESSE: Biogen, Inc.
STREET: 14 Cambridge Center
US-09-588-995A-6
US-08-928-361B-5
US-09-538-092-1258
US-09-538-092-1258
US-08-928-361B-8
US-08-928-361B-8
US-08-928-361B-17
US-08-928-361B-17
US-08-928-361B-18
US-09-588-995A-18
US-09-588-995A-18
US-09-588-995A-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-20
US-08-928-361B-15
US-08-928-361B-15
US-08-928-361B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 7, Application US/09197970B
Patent No. 6664385
GENERAL INFORMATION:
APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 02142
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Cambridge
        227.5
227.5
227.5
226.5
```

Score 1749; DB 4; Length 334; Pred. No. 7.9e-136;

100.0%;

9 9

240

182

```
61 IVWTNGTHVTYRKETRYKLLGNLSRRDVSLTIANTAVSDSGIYCCRVKHSGWFNDMKITI 120
                                                                                                                                                                                                                                                                                                             T------SVPITISIPTITSVPVITIVEPMPLPRQNHEPV 220
                                                                                                                                                                                                                                                                                                                                                                                        221 ATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH 280
                                                                                                                                                                                                                                                                                                                                                                                                              61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                       -----TTTPIVITVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 5; Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: HEPATITIS A VIRUS RECEPTOR AND METHODS TITLE OF INVENTION: OF USE NUMBER OF SEQUENCES: S CORRESPONDENCE ADDRESS: ADDRESSE: NEEDLE & ROSENBERG, P.C. STREET: Suite 1200, The Candler Bldg, 127 Peachtree STREET: Street CITY: Atlanta STATE: Georgia COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281 SLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 SPOMVNTTEGIYAGVCISVLVLLAVLGVVIAKKYPFKKEIQQL 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: PCT/US95/09941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74.8%; Score 1309;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application PC/TUS9509941
GENERAL INFORMATION:
                                                                                                                                                                                                                                  140 TVTTVRTSTTVPTTTTVP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CIASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/287,001
FILING DATE: 5 AUG 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 36,016
REFISENCE/DOCKET NUMBER: 141
TELECOMMUNICATION INFORMATION
TELEPHONE: 404/688-0770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               451 amino acids
amino acid
                                                                                                                                                       SLEIVPPKV-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  404/688-9880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 30303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US95-09941-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCT-US95-09941-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                               셤
                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                           g
                                                                            ò
                                                                                                                                                   ઠે
                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                   61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                       120
                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                     241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                        241 İRREPISSPLYSYTIDGNDIVIESSDGLWINNIQIQLFLEHSLLIANTIKGIYAGVCISVL 300
                                                                                                                                                                                              SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTWPTTMSIPTTTTVPTTMTVS 180
                                        9
                                                                            9
                                                                                                                                         61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                        121 SLEIVPPKVITTPIVTTVPIVTIVRTSTIVPTITTVPTTTVPTTMSIPTITTVPTTMTVS
                                                                                                                                                                                                                                                                                             TITSVPITITSIPITITSVPUTITVSTFVPPMPLPRQNHEPVATSPSSSQPAETHPITLQGA
                                                            1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                        TITSVPITITSIPITITSVPVITITVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                    1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 74.8%; Score 1309; DB 1; Length 451; Best Local Similarity 63.3%; Pred. No. 1.6e-99; Matches 255; Conservative 36; Mismatches 32; Indels 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08287001A
Sequence 2, Application US/08287001A
Patent No. 5622861
GENERAL INFORMATION:
APPLICANT: KAPLAN GERARDO
APPLICANT: FEINSTONE, STEPHEN M.
TITLE OF INVENTION: HERATITIS A VIRUS RECEPTOR AND METHODS
INTILE OF INVENTION: OF USE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: NEEDLE & ROSENBERG, P.C.
STREET: Suite 1200, The Candler Bldg, 127 Peachtree
STREET: Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/287,001A
                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 VLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
ATTORNEY/ASENT INFORMATION:
NAME: Spratt, Gwedolyn D.
REGISTRATION NUMBER: 36,016
REFERENCE/DOCKET NUMBER: 1414
TELECHMUNICATION INFORMATION:
TELECHONE: 404/689-0770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 404/688-9880
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy A-
COMPUTER: IPM
COMPUTER:
  Matches 334; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Atlanta
STATE: Georgia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-287-001A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-287-001A-2
                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                      셤
                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                 ò
                                                                                                                                                   셤
                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

셤 Š 욥 요

ઠે

셤

ò

a

ò

요

ò

Š

```
180 STTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240 AIRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISV 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192 ---AEVTETPSYT-PADWNGTVT-SSEEAWNNHTVRIPLRKP--QRNPTKGFYVGMSVAA 244
                                                                                                                                                                                                                                                                                                                                                                      65 IWTNGYQVTYRSSGRYNIKGRISEGDVSLTIENSVDSDSGLYCCRVEIPGWFNDQKWTFS 124
                                                                                                                                                                                                                                                                                                                                                                                                                                       LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPT--TTTVPTTTVPTTMSIPTTTVPTTMTV 179
                                                                                                                                                                                                                                                                                                                                               62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                            5 QVFISGLILLEGSVDSYBVVKGVVGHPVTIPCTYSTRGGITTTCWGRGQCPYSSCQNIL 64
                                                                                                                                                                                                                                                       4 QVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS--GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 9, Application US/08487748A

Sequence 9, Application US/08487748A

Patent No. 5721351

GENERAL INFORMATION:
APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS;
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CORRESPONDENTY: U.S.A.
STATE: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                          Gaps
                                                                                                                                                               DB 4; Length 307;
                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,748A
FILING DATE: O7-JUN-1995
GLASSIFICATION NUMBER: 30,742
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-023
FELEPHONE: (212) 790-9090
TELEPHONE: (212) 869-8864/9741
TELEPHONE: (212) 869-8864/9741
TELEPHONE: G141 PENNIE
INFORMATION POR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
TWORMATION POR SEG ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
                                                                                                                                                            29.9%; Score 522.5; DB 4; 39.4%; Pred. No. 4.2e-35; tive 39; Mismatches 93;
              TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-197-970B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300 LVLLALLGVIIAKKY-FFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245 LLLLLLASTVVVTRYIIIRKKMGSL 269
       LENGTH: 307 amino acids
                                                                                                                                                                                                          Matches 128; Conservative
                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 5
US-08-487-748A-9
                                                                                                                                                                 Query Match
                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                       61 IVWTNGTHVTYRKETRYKLLGNLSRRDVSLTIANTAVSDSGIYCCRVKHSGWFNDMKITI 120
                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                              61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                               ----TTTVPTTMSIPTTTVPTTMTVSTT 182
                                                                                                                                                                                                                                                                                                                                                                                                                                       T------BANDENGHEEV 220
                                                                       9
                                                                                                                  9
                                                                                                 1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                       SLEIVPPKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221 ATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH
                            Gaps
                       80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTY: USA
ZIP: 02142
ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/197, 970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
Hanry Wei
Richard L. Cate
TITLE OF INVENTION: MOULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         281 SLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 SPQMVNTTEGIYAGVCISVLVLLLAVLGVVIAKKYFFKKEIQQL 403
Best Local Similarity 63.3%; Pred. No. 1.6e-99; Matches 255; Conservative 36; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: A010 PCT CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 679-2810
TELEFAX: (617) 679-2838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-MAY-1996
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09197970B Patent No. 6664385 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-197-970B-3
                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                       121
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-480-070C-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-480-070C-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX:
              Query Match
                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                        윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                          ò
                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68 LRIDERNVIYQKSSRYQLKGDLNKGDVSLIIKNVILDDHGTYCCRIQFPGLMNDKKLELK 127
                                                                                                                                                                                                                                                                                                                  122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                            182 TISVPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPTILQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                     ----- PRTL---- 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                    62 WWINGTHUTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                              10 VLLLLQLLLARSLEDGYKV--EVGRNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                                      6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                               78; Indels 120; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Levinson, Douglas A.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                            Length 281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                     Query Match
16.7%; Score 292; DB 1;
Best Local Similarity 27.5%; Pred. No. 3.2e-16;
Matches 89; Conservative 37; Mismatches 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/487,748A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                         128 LDIKAAKVT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                   137 -----PAQTAHGDSTTAS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7853-023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Application US/08487748A
Patent No. 5721351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 969-9900
TELEFAX: (212) 969-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: unknown
; MOLECULE TYPE: protein
US-08-487-748A-10
            ; MOLECULE TYPE: protein US-08-487-748A-9
unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New York
: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Levins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-487-748A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154
                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
154 ------TERNGSETQTLVTLHNNNGTKISTWADBIKDSGETIRT--AIHIGVG 199
                                                                                                                                                                                                                                                         68 LRIDERNVIYQKSSRYQLKGDLNKGDVSLIIKAVTLDDHGTYCCRIQFPGLMNDKKLELK 127
                                                                                                                                                                                                                                                                                                                                     122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----PRTL---- 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242 RREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                         62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                              10 VILILQILIARSLEDGYKV--EVGKNAYLPCSYTLPTSGTLVPMCWGKGFCPMSQCTNEL 67
                                                                                                              6 VILSLILHHADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 24
CORRESPONDENCE PADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                       78; Indels 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.7%; Score 292; DB 3; Length 281; 27.5%; Pred. No. 3.2e-16;
16.7%; Score 292; DB 1; Length 281; 27.5%; Pred. No. 3.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,070C
FILING DATE: 07.-UNN-1995
CLASSIFICATION: 530
                                                       89; Conservative 37; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          137 -----PAQTAHGDSTTAS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Application US/08480070C Patent No. 6066498 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             |:|
|128 LDIKAAKVT-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (212) 869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : 281 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy d:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New York
```

```
68 LRIDERNVIYQKSSRYQLKGDINKGDVSLIIKAVTILDDHGTYCCRIQPPGLMNDKKLELK 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 VWINGTHVTYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                         182 TISVPTITSIPITISVPVITIVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTILQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----- 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                        10 VLLLLQLLLARSLEDGYKV--EVGRONAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                           6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
                                                                                             78; Indels 120;
                                                     Length 281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
16.7%; Score 292; DB 3;
Best Local Similarity 27.5%; Pred. No. 3.2e-16;
Matches 89; Conservative 37; Mismatches 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Diskette
COMPUTER: IBM Comparible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEN Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/609,583A
FILING DATE: 01-MAR-1996
FILING APPLICATION 536
PRIOR APPLICATION 1536
PRIOR APPLICATION 1995
APPLICATION NUMBER: US 08/487,748
FILING DATE: 03-MAR-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              297 ISV-LVLLALLGVIJAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10, Application US/08609583A Patent No. 6204371 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                           128 LDIKAAKVT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEFAX: 212-869-8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 3(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10036/2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-609-583A-10
    US-08-829-525-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                    a
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                               68 LRTDERNVIYQKSSRYQLKGDLNKGDVSLIIKNVTLDDHGTYCCRIQFPGLMNDKKLELK 127
                                                                                                                                                                                                                                                                                                                                                                                                                    242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 VWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                             122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                         182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                          10 VLLLLQLLLARSLEDGYKV--EVGKNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                             6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
  78; Indels 120; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
37; Mismatches
                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTERO VERSION 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/829,525
FILING DATE: 28-MAR-1997
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/609,583
FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10, Application US/08829525
Patent No. 6084083
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                           128 LDİKAAKVT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 212-869-8864
TELEX: 66141 PENNIE
INPORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 212-790-9090
89; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 10036/2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-829-525-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
Matches
                                                                                                                                    ò
                                                                                                                                                                               셤
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
Sequence 10, Application US/09310367
Patent No. 6414117
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       128 LDİKAAKVİ------
    10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                       281 amino acids
amino acid
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                        TOPOLOGY: unknown
MOLECULE TYPE: protein
                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-310-367-10
                                                                                                                 US-08-937-399-10
                                       LENGTH:
                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                       62 VWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                              242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------TTERNGSETQTLVTLHNNNGTKISTWADEIKDSGETIRT--AIHIGVG 199
                                                                                                                                                                                                                                                                                                                      122 LEIVPPKVTTTPIVITVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                  182 TISVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                         10 VLLLLQLLLARSLEDGYKV--EVGKNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                                           6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                                   78; Indels 120; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
                                                                              Length 281;
                                                                          Query Match

16.7%; Score 292; DB 3;
Best Local Similarity 27.5%; Pred. No. 3.2e-16;
Matches 89; Conservative 37; Mismatches 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/609,583
FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-UNN-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                       137 -----PAQTAHGDSTTAS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REGISTRATION NUMBER: 7853-048
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: DOS
SOFTWARE: FaetSEQ Version 2.0
SOFTWARE: APPLICATION DATA:
APPLICATION NUMBER: US/08/937,399
                                                                                                                                                                                                                                                                                                                                                           128 LDİKAAKVİ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-937-399-10
; Sequence 10, Application US/08937399
? Patent No. 6288218
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUCALL
STREET: 1155 AVELLA
CITY: New York
STATE: New York
COUNTY: USA
ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE
AMBURTER: IBM COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : 212-869-8864
66141 PENNIE
                MOLECULE TYPE: protein US-08-609-583A-10
    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
TELEX: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        154
                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
68 LRIDBRAVIYQKSSRYQLKGDLINKGDVSLIIKAVTLDDHGTYCCRIQFPGLMAVKKLELK 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182 TISVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    154 ------TTERNGSETQTLVTLHNNNGTKISTWADBIKDSGETIRT--AIHIGVG 199
                                                                                                                                                                                                                                                62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                    122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTTVPTTMSIPTTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----- 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                     67
                                                                                                                         6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                               10 VLLLLQLLLARSLEDGYKV--EVGKNAYLPCSYTLPFTSGTLVPMCWGKGFCPWSQCTNEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
                                                              78; Indels 120;
   Length 281;
ch 16.7%; Score 292; DB 3; 1 Similarity 27.5%; Pred. No. 3.2e-16; 89; Conservative 37; Mismatches 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER:
FILING DATE: 28-MAR-1997
APPLICATION NUMBER: US 08/609,583
FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-UN-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 13-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAUTA A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   137 -----PAQTAHGDSTTAS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FREESEN, DOS SOFTWARE: FREESEN VERSION 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/310,367 FIRING DATE:
```

œ

```
154 ------TTERNGSETQTLVTLHNNNGTKISTWADEIKDSGETIRT--AIHIGVG 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 VWINGTHVTYRKDIRYKLLGDLSRRDVSLIIENTAVSDSGVYCCRVEHRGWFNDMKIIVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 VLLLLQLLLARSLEDGYKV--EVGKNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 16.7%; Score 292; DB 4; Length 281;
Best Local Similarity 27.5%; Pred. No. 3.2e-16;
Matches 89; Conservative 37; Mismatches 78; Indels 120; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
                                                                                          REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-016
TELECOMONIACATION INCORMATION:
TELEPHONE: 212-790-909
TELEPAX: 212-869-8864
TELEFAX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 LDİKAAKVİ -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137 ------PAQTAHGDSTTAS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSES: Fennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297 ISV-LVLLALLGVIIAKKYFFKKE 319
         US 08/398,633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09/464,231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-464-231-10
; Sequence 10, Application US/09464231
; Patent No. 6562343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/464,
APPLICATION NUMBER: US 08
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                           TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-09-032-337-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: New York STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154 ------TTERNGSETQTLVTLHNNNGTKISTWADEIKDSGETIRT--AIHIGVG 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 VLLLLQLLLARSLEDGYKV--EVGRNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY ---- SGAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                    78; Indels 120;
                                                                                                                                                                                                                                                                                                                                 Query Match 16.7%; Score 292; DB 4; Length 281; Best Local Similarity 27.5%; Pred. No. 3.2e-16; Matches 89; Conservative 37; Mismatches 78; Indels 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               137 -----PAQTAHGDSTTAS-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CIITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          297 ISV-LVLLALLGVIIAKKYFFKKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200 VSAGLTLALIIGVLILKWYSCKKK 223
30,742
ER: 7853-081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/609,583
FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-UUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: DOS
OPTWARE: FBSTSEQ Version 2.0
CUGRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/032,337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128 LDIKAAKVT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-032-337-10
; Sequence 10, Application US/09032337; Patent No. 6455685
; GENERAL INFORMATION:
  REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7883
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-909
TELERAK: 212-869-8864
TELEX: 6141 PENNIE
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 10036/2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 281 amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                               ; MOLECULE TYPE: protein US-09-310-367-10
                                                                                                                                                                                                                                              unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
SOFTWARE: FastSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ጵ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

US/08/829,525

ω

```
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --- 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182 TISVPTTTSIPTTISVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ....... 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLF----LEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHY----SGAVTSMCWNRGSCSLFTCQNGI 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 VILILQILILARSLEDGYKV--EVGKNAYLPCSYTLPTSGTLVPMCWGKGFCPWSQCTNEL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. **
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0. ***
Sequence 2.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78; Indels 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16.7%; Score 292; DB 4; Length 281; 27.5%; Pred. No. 3.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37; Mismatches
                          FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-UN-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: COLUZZI, LAULA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-048
TELECOMMUNICATION INFORMATION:
TELEPAX: 212-869-8864
TELEPAX: 212-790-9090
TELEPAX: 212-869-8864
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
TELEPAX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200 VSAGLTLALIIGVLILKWYSCKKK 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                137 -----PAQTAHGDSTTAS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297 ISV-LVLLALLGVIIAKKYFFKKE 319
US/08/609,583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128 LDİKAAKVT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : 281 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10036/2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-464-231-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-829-525-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
```

ò 셤 셤 Š 셤 ò 셤 ò ద ò

Š

```
62 VWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTWPTTMSIPTTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182 TISVPTTISIPTTISVPVTTIVSTFVPPMPLPRQNHEPVATSP--SSPQPAETHPTTLQG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -------TLQRDFTAAFPRMLTT-- 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----RGHGPAETQTLGSLPDINLTQISTLAN 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----RIGİYIGAĞICA 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 VILILILILITRS--SEVEXRAEVGQNAYLPCFYTPAAPGNLVEVCWGKGACPVFECGNVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS----GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240 AIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIY--AGVCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24, Application US/08609583A

Patent No. 620471

GENERAL INFORMATION:
APPLICANT: Levinon, Douglas A.
TITLE OF INVENTION:
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF IMMUNE DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99; Indels 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.3%; Score 267; DB 3; Length 301; 26.9%; Pred. No. 4e-14; tive 32; Mismatches 99; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 SVLVLLALLGVIIAKKYFFKKE-VQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212 G-LALALIFGALIFKWYSHSKEKIÓNL 237
              CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 808/609,583
FILING DATE: 01-MAR-1996
APPLICATION NUMBER: US 08/487,748
FILING DATE: 07-UN-1995
APPLICATION NUMBER: US 08/398,633
FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: COUNZI, Laura A
REGISTRATION NUMBER: 30,742
REPERENCE/DOCKET NUMBER: 7853-081
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: 212-869-8864
TELEFAX: 212-869-8864
TELEFAX: 66141 PENNIE
TELEFAX: 66141 PENNIE
TELEFAX: 66141 PENNIE
TELEFAX: 66141 PENNIE
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182 ELR----DSRLANDLRDSGATI----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       127 LVIKPAKVTPAP-----
28-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 301 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 26.94
Matches 88; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10036/2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-609-583A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Nev
STATE: Ne
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-829-525-24
```

```
COMPUTER READABLE FORM:

MENDION TYPER:
Diskette
COMPUTER: IBM Compatible
SOFTWARE: FastSGQ Version 2.0
SOFTWARE: FastSGQ Version 2.0
SOFTWARE: FastSGQ Version 2.0
CURRENT APPLICATION NUMBER: US/08/609,583A
FILING DATE: 01-MAR-1996
CLASSIPICATION NUMBER: US 08/487,748
FILING DATE: 07-UN-1995
FILING DATE: 07-UN-1995
ATTORNEY/AGENT INFORMATION:
NAME: COTUZI, Laura A.
REGISTRATION NUMBER: 30,742
REFERRINGE/DOCKET NUMBER: 30,742
REGISTRATION NUMBER: 30,742
REGISTRATION NUMBER: 30,742
FILING DATE: 01-WAR-1996
FILING DATE: 02-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-WAR-1996
FILING DATE: 03-049-8864
FILING DATE: 03-049
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FILING DATE: 03-049-0490
FRAGMENT TYPE: internal
US-08-609-583A-24
```

Query Match
15.3%; Score 267; DB 3; Length 301;
Best Local Similarity 26.9%; Pred. No. 4e-14;
Matches 88; Conservative 32; Mismatches 99; Indels 108; Gaps 11; 62 VWINGTHUTYRKDIRYKLLGDLSRRDVSLILIENTAVSDSGVYCCRVEHRGWFNDMKIIVS 121 68 LRTDERDVNY-WTSRYWLNGDFRKGDVSLTIENVTLADSGIYCCRIQIPGIMNDEKFNLK 126 122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTMSIPTTTTVPTTMTVST 181 -------TLQRDFTAAFPRMLTT-- 154 182 TISVPITISIPITISVPVITIVSTFVPPMPLPRQNHEPVATSP--SSPQPAETHPTTLQG 239 240 AIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIY--AGVCI 297 ----RGHGPAETOTLGSLPDINLTOISTLAN 181 10 VLLLELELLTRS--SEVEYRAEVGQNAYLPCFYTPAAFGNLVEVCWGRGACPVFECGNVV 67 6 VILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS----GAVTSMCWNRGSCSLFTCONGI 61 298 SVLVLLALLGVIIAKKYFFKKE-VQQL 323 127 LVIKPAKVTPAP------155 -----ઠ 셤 ઠે 셤 ઠે 셤 ò g ઠે 셤 ð

212 G-LALALIFGALIFKWYSHSKEKIQNL 237

Search completed: June 29, 2005, 09:02:59 Job time : 47.9332 secs

HIS PREK BILIM US POLITICAL

```
5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2005
```

OM protein - protein search, using sw model

June 29, 2005, 08:57:16; Search time 237.54 Seconds (without alignments) 543.815 Million cell updates/sec Run on:

US-10-718-321-7

Title: Perfect score:

1 MHPQVVILSLILHLADSVAG......FFKKEVQQLRPHKSCIHQRE 334 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2105692 seqs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

genesequ1980s:*
genesequ2000s:*
genesequ200s:*
genesequ2001s:*
genesequ2001s:*
genesequ2001s:*
genesequ2001bs:* A Geneseq 16Dec04:* 1: genesecm1980c.t Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		de				
Result No.	Score	Query Match	Length	DB	αI	Description
1	1749	100.0	334	~	AAW38336	Aaw38336 Human kid
7	1749	100.0	334	9	AA026679	Aao26679 KIM-1 rel
m	1749	100.0	334	æ	ADQ76696	Adq76696 Human kid
4	1684	96.3	359	9	ABR58582	Abr58582 Human can
Ŋ	1684	96.3	359	9	ABP70438	Abp70438 Amino aci
9	1684	96.3	359	9	ABR48174	Abr48174 Human bla
7	1684	96.3	359	9	AA026680	Aao26680 KIM-1 rel
ω	1684	96.3	359	7	ADE36594	Ade36594 Human NOV
σ	1684	96.3	359	۲	ADN38984	Adn38984 Cancer/an
10	1684	96.3	359	æ	ADQ76690	Adq76690 Human kid
11	1679	96.0	359	9	ABP70439	Abp70439 Amino aci
12	1671	95.5	359	9	ABP70441	Abp70441 Amino aci
13	1666	95.3	365	9	ABP70440	Abp70440 Amino aci
14	1655.5	94.7	364	9	ABP70442	Abp70442 Amino aci
15	1643.5	94.0	364	9	ABP70443	
16	1587	90.7	339	^	ADE36618	Ade36618 Plasmid p
17	1587	7.06	339	_	ADE36592	_
18	1529	87.4	298	œ	ADQ76693	Adq76693 Human KIM
19	1529	87.4	518	æ	ADQ76691	Adq76691 Human KIM
20	1393	79.6	263	7	ADE36629	Ade36629 Human NOV
21	1393	79.6	263	7	ADE36622	Ade36622 Plasmid p
22	1393	79.6	263	۲	ADE36596	Ade36596 Human NOV
23	1306	74.7	451	~	AAR92803	Aar92803 Hepatitis
24	707	40.4	357	ω	ADQ76692	Adq76692 Human KIM
25	592	33.8	108	7	ADE36598	Ade36598 Human NOV

007 2 AAW38334 005 6 ABP70430 65 8 ADP70631 65 8 ADO76695 81 6 ABP70436 05 6 ABP70432 05 6 ABP70433 05 6 ABP70433 05 6 ABP70437 07 8 AAW39027 07 8 AAW39027 08 1 AAW39027 08 1 AAW39027 08 1 AAW39027 08 1 AAW39027 08 1 AAW39027 09 AAW39027	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	29.9 29.7 28.1 26.1 26.1 26.1 27.7 81 6 22.9 30.5 22.9 30.5 22.9 30.5 22.9 30.5 21.0 37.8 27.8 28.1 28.1 28.1 28.1 28.1 28.1 28.1 28.1 38.1 48.1 49.1 40.1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Aaw38334 Rat kidne Abp70430 Amino aci	Amino	Adq76695 Mouse kim	Aao26678 Human KIM						Abp70446 Amino aci	Human	Abp70447 Amino aci	Aay38395 Human sec			Aab50696 Mouse 200	Aab59162 Murine 20	Aam50225 Mouse 200	Aab81511 Murine TH
0.00 0.00		299 209 200 200 200 200 200 200 200 200	299 209 200 200 200 200 200 200 200 200	AAW38334 ABP70430	ABP70431	ADQ76695	AA026678	ABP70436	ABP70432	ABP70433	ABP70437	AAM39027	ABP70446	AAY25768	ABP70447	AAY38395	AAW01047	AAY97056	AAB50696	AAB59162	AAM50225	AAB81511
		299 209 200 200 200 200 200 200 200 200	299 209 200 200 200 200 200 200 200 200	07 2	82 6	65 8	81 6	45 6	9 50	9 50	45 6	78 4	78 6	79 2	78 6	83 2	81 2	81 3	81 4	81 4	81 4	81 4

ALIGNMENTS

```
Kidney injury related molecule; KIM; human; renal disease; injury; nephritis; tissue regeneration; therapy; monoclonal antibody.
                                                                                                                                                                    Wei
                                                                                                                                                                    Sanicola-Nadel M, Bonventre JV, Hession CA, Ichimura T,
                                         Human kidney injury related molecule (KIM).
AAW38336 standard; protein; 334 AA
                                                                                                                    97WO-US009303.
                                                                                                                                 96US-0018228P.
96US-0023442P.
                            (first entry)
                                                                                                                                                      (BIOJ ) BIOGEN INC.
                                                                           Homo sapiens.
                                                                                         WO9744460-A1
                                                                                                                    23-MAY-1997;
                                                                                                                                 24-MAY-1996;
23-AUG-1996;
                           21-MAY-1998
                                                                                                      27-NOV-1997.
             AAW38336;
                                                                                                                                                                            Cate RL;
```

WPI; 1998-018514/02.

DNA encoding kidney injury related molecule - which is upregulated in injured or rejenerating tissue, useful to promote growth of new tissue and survival of damaged tissue.

Ï

Claim 9; Page 46-47; 68pp; English.

This protein, designated kidney injury related molecule (KIM), is upregulated in injured or regenerating tissue. Its amino acid sequence was deduced from a clone (see AAT96035) obtained from a human embryonic liver library. A 572-amino acid (see AAM98335) and a 307-amino acid rat KIM (see AAM38334) are also claimed. Recombinant KIM polypeptides can be expressed in prokaryotic and eukaryotic host cells using a claimed process. Soluble variants fused to a toxin, imageable compound or radionuclide, and IgG fusion proteins are also claimed. KIM, or an agonist, can used to treat renal disease and to promote the growth of new tissue or the survival of damaged tissue, generally in conditions where the binding of specific ligand to KIM stimulates cell growth, maintains

N

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                   9
cellular differentiation or reduces apoptosis, e.g. in cases of renal failure, nephritis, kidney transplants, toxic or hypoxic injury. A monoclonal antibody specific for KIM can be used to treat renal disease, e.g. where binding of KIM to ligand results in neoplasia, loss of cellular function, susceptibility to apoptosis or promotion of inflammation, deliver imaging agents to KIM expressing cells in vivo or la neitz and measure KIM concentration by immunoassay.

Manage/regeneration of renal cells can be determined by measuring KIM, particularly to diagnose or monitor the progress of disease or therapy. Afthe-expressing tumour cells can be inhibited by treatment with a fusion protein comprising KIM ligand or Mab with a toxin or radionuclide, and tumour cells that express KIM ligand can be inhibited with similarly tagged KIM or anti-KIM ligand can be inhibited with similarly
                                                                                                                                                                                                                                                                                                                                                                                    61 IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRONHEPVATSPSSPQPABTHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                   1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                      IVWINGTHVTYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKIIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITSVPITISIPITISVPVTITVSIFVPPMPLPRQNHEPVATSPSSPQPAETHPTILQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor; kidney injury molecule-1, KIM-1, renal disease; injury, renal cancer; human.
                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                         100.0%; Score 1749; DB 2; Length 334; 100.0%; Pred. No. 7.1e-118; ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KIM-1 related protein, SEQ ID No 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAO26679 standard; protein; 334 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                            Matches 334; Conservative
                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                          Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA026679;
                                                                                                                                                                                                                                                                                                               Local
       $$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1 protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                    New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide; muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic; antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                                                                                                                                                                                                                                                                                                                       1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITSVPITISIPITISVPVITIVSTEVPPMPLPRONHEPVATSPSSSPQPAETHPITILQGA
                                                                                                                                                                                                                                                                                                                                                                                   1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                             Length 334;
                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                           100.0%; Score 1749; DB 6;
100.0%; Pred. No. 7.1e-118;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human kidney injury molecule-1 (KIM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .20
/label= Signal_peptide
65. .67
/note= "N-glycosylated"
                                                                                                                                Disclosure; Page 39-40; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADQ76696 standard; protein; 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 334; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258. .260
Bonventre
                          WPI; 2003-156845/15.
                                                                                                      e.g. renal cancer.
                                                                                                                                                                                                                                                                                                 Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ76696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADQ76696
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

m

9

MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG

```
/note= "Transmembrane domain"
324. .334
/note= "C-terminal region unique to this splice variant"
                                                                                                                                                                 Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.
/note= "N-glycosylated"
272. :274
/note= "N-glycosylated"
                           /note= "N-glycosylated"
290. .311
                                                                                                                                                                                                     Disclosure; SEQ ID NO 1; 68pp; English.
                                                                                               29-DEC-2003; 2003WO-US041294,
                                                                                                            30-DEC-2002; 2002US-0436934P.
                                                                                                                         (BIOG-) BIOGEN IDEC MA INC.
                   .288
                                                                                                                                                    WPI; 2004-534277/51.
                                                                   WO2004060041-A2
      Modified-site
                    Modified-site
                                                                                 22-JUL-2004
                                                                                                                                       Rennert PD;
                                  Domain
                                               Region
```

The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (IM) family. This protein has 34 amino acids or (1g) and mucin domain (TIM) family. This protein has 34 amino acids or 159 amino acids ADO76690, depending on splice variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the cinteraction of T cells and other immune system cells, e.g. dendritic cells, monocytes, macrophages and B cells, and thereby strongly suppresses an IgG response to antigen. Such treatment also eliminates (IgG) production by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor reduces secretion of interferon-gamma by immune cells engaged in an antigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention provides method is claimed for inhibiting condulating immune system. A method is claimed for inhibiting and ammal. The method involves identifying a mammal with an immune disease or disorder, or one preparing to receive a tissue graft, and administering a KIM-1 antagonist, sepecially a polypeptide comprising: a KIM-1 antagonist, sepecially a polypeptide comprising: a KIM-1 antagonist, sepecially a polypeptide of an anti-KIM-1 antibody. Preferably, the KIM-1 antagonist is used in method set coty the antagonist may be conjugated to a polymer such as an RC moiety. The antagonist may be conjugated to a polymer such as an RC moiety. The antagonist may be conjugated to a polymer such as in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting energy of an ant polygrteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of idiopathic thrombocytopenia purpura, Wegener's granulomatosis, Sequence 334 AA;

ö

Gaps

ö

100.0%; Score 1749; DB 8; Length 334; 100.0%; Pred. No. 7.1e-118; ive 0; Mismatches 0; Indels 0

Matches 334; Conservative

Best Local Similarity

Query Match

```
120
                                                          120
                                                                                        180
                                                                                                        240
                                                                                                                                                                                  240
                                                                                                                                                                                                                                241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                              241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes an isolated nucleic acid molecule, which comprises the sequence of any of the genes that are up-regulated or down-regulated in specific cancers (e.g. about 1031 genes up-regulated in acute lymphocytic leukemia). ACC72641 or ACC72860 represent cancer related gene nucleotide sequences which encode the proteins given in
 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New genes that are up-regulated or down-regulated in cancers, useful as markers for diagnosing e.g. cancer, ischemia or heart diseases, or as therapeutic targets for screening drugs for treating these diseases.
                                             61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                    1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                              61 IVWINGTHVIYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKIIV
                                                                                      121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                    TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; cancer; diagnosis; screening; modulator; leukaemia; ischaemia;
heart disease; atherosclerosis; endometriosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aziz N, Gish KC, Hevezi PA, Mack DH, Wilson KE;
                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                         301 VLLALLGVIIAKKYFFKKEVQQLRPHKSCIHQRE 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human cancer related protein SRQ ID NO:239
                                                                                                                                                                                                                                                                                                                                                                                   Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 12; Page 742; 767pp; English.
                                                                                                                                                                                                                                                                                                                                                                                ABR58582 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EOSB-) EOS BIOTECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-0350666P.
2002US-0355145P.
2002US-0355257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-US029560.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0323469P.
2001US-0323887P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002US-0372246P
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-354600/33.
N-PSDB; ACC72709.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003025138-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-NOV-2001;
08-FEB-2002;
08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zlotnik A;
                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Afar D.
                                                                                                                                                                                                                                                                                                                                                                 ABR58582
                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                     셤
                                                                                      ò
                                                                                                                    셤
                                                                                                                                                                             요
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                       ò
```

```
ABR58521 to ABR58709. Also described: (1) determining the presence or absence of a pathological cell in a patient; (2) an expression vector comprising a nucleic acid molecule described above; (3) a host cell comprising the vector; (4) an isolated polypeptide, which is encoded by the nucleic acid; (5) an antibody that specifically binds the polypeptide of (4); (6) specifically targeting a compound to a pathological cell in a patient by administering to the patient the antibody above; and (7) a crosp screening assay. The nucleic acid is useful as diagnostic markers or therapeutic targets. In particular, the nucleic acid is useful for diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow, bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary, cancreas, prostate, skin and uterus), wounds, ischaemia, heart diseases, atherosclerosis and endometriosis. The nucleic acid is also useful in carry and accenting, particularly for identifying agents for treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKIIV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMIVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SLEIVEPKVTTTPIVTTVETVTTVRTSTTVPTTTTVPTTTTVPTTMSIPTTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                      1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T cell immunoglobulin domain; mucin domain; TIM, TIM-1; TIM-2; TIM-3; TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma;
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                            Length 359;
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                          96.3%; Score 1684; DB 6; L
100.0%; Pred. No. 3.7e-113;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amino acid seguence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABP70438 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                         Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                              Best Local Sim
Matches 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABP70438;
                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         $$$$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

(STRD) UNIV LELAND STANFORD JUNIOR.

```
domain-1 (TIM-4) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved 1gV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM proteins, which critically regulate CD4 T cell springiation. Thi cells preferentially express TIM-3, while Th2 cells preferentially express TIM-1. TIM polypeptides and polymucleotides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IVWINGTHVIYYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKIIV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                 The present sequence is a human T cell immunoglobulin domain and mucin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITSVPITISIPITISVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
             Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human bladder cancer associated protein sequence SEQ ID NO:64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; bladder cancer; cytostatic; gene therapy; vaccine.
               Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96.3%; Score 1684; DB 6; L 100.0%; Pred. No. 3.7e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. No.
               Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 VLLALLGVIIAKKÝFFKKEVQQL 323
                                                                                                                                                                                 Claim 10; Page 80-81; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ŕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABR48174 standard; protein; 359
               Dekruyff RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 323; Conservative
                                                   2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                     N-PSDB; ABZ68332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003003906-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
               Acintire JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABR48174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABR48174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
```

ö

Z

AAO26680 standard; protein; 359

S

```
The present invention describes a method for detecting a bladder cancerassociated transcript in a cell from a patient. The method comprises contexting a biological sample from the patient with a polymucleotide that selectively hybridises to a sequence that is 80 % identical to a cape that selectively hybridises to a sequence that is 80 % identical to a cape the human bladder cancer-associated proteins given in ABR48166 to ABR48242). Bladder cancer-associated proteins given in hapR48166 to have cytostatic activities, and can be used in antisense gene therapy and can vectorine production. The method can be used for detecting a bladder cancer-associated transcript in a cell from a patient. The method is useful in diagnosing or treating bladder cancer and in screening for compounds that modulate bladder cancer, such as hormones or antibodies. The nucleic acid molecules from the present invention may be used in various screening and diagnostic methods, and for gene therapy, vaccine and/or antisense/inhibition applications
                                                                                                                                                                                                                                                                                                                                                          Detecting a bladder cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a bladder cancer-associated polynucleotide or antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SLBIVPPKVTTTPIVTTVPTVTVRTSTTVPTTTTVPTTTVPTTTWSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTTVPTTTRSIPTTTTVPTTTVPTTRS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 IRREPISSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLPTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITSVPITITSIPITITSVPVITITVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITSVPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96.3%; Score 1684; DB 6; L
100.0%; Pred. No. 3.7e-113;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 10; Page 252; 307pp; English.
                                                                                                                                                                                                                      (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                              03-JUL-2001; 2001US-0302814P.
03-JUG-2001; 2001US-0310099P.
08-NOV-2001; 2001US-0343705P.
13-NOV-2001; 2001US-0350666F.
12-APR-2002; 2002US-0372246P.
                                                        03-JUL-2002; 2002WO-US021338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100
                                                                                                                                                                                                                                                                                                     2003-201532/19
                                                                                                                                                                                                                                                             Mack DH, Aziz N;
                                                                                                                                                                                                                                                                                                                        N-PSDB; ACC50985.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
```

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits protoclytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1 protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCMNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRONHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                          gene therapy; antibody; antigen; antigen-binding;
release; inhibitor; kidney injury molecule-1; KIM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
96.3%; Score 1684; DB 6; Length 359;
Best Local Similarity 100.0%; Pred. No. 3.7e-113;
Matches 323; Conservative 0; Mismatches 0; Indels
                                                                                                                                                       renal disease; injury; renal cancer; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 40-41; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                         KIM-1 related protein, SEQ ID No 8.
                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                               01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                           (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                            <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                            Bailly V, Bonventre
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .g. renal cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 359 AA;
                                                                                                                                                                                                                    WO200298920-A1
                                                                                                                                                                                        Homo sapiens.
                                                                                                                          Cytostatic;
proteolytic
                                                            20-MAR-2003
                                                                                                                                                                                                                                                   12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

ö

AA026680

용

```
Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
  181 TITSVPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGA 240
                                                 241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                           241 IRREPISSPLYSYTTDGNDTVTESSDGL#NNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal ineovascularistation syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to nucleic acids and proteins (ADN38683-ADN40064) whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods
                                                                                                                                                                                                                                                                                                                                                                                                                                       Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hevezi PA;
A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glynne R,
E, Zlotnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gish KC, Gly
Wilson KE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; SEQ ID NO 302; 1385pp; English.
                                                                                                                                                                   301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                         VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                     Ą
                                                                                                                                                                                                                                                                                                     ADN38984 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ginsburg WM,
R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0340376P.
2002US-0347211P.
2002US-0347349P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0355250P.
2002US-0356714P.
2002US-0359077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0332464P.
2001US-0334393P.
2001US-0335394P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0368809P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0370110P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0372246P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0386614P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0396839P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-0397775P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0397845P
                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-468649/44.
N-PSDB; ADN38983.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Murray R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aziz N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003042661-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JAN-2002;
08-FEB-2002;
13-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-NOV-2001;
03-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2002;
29-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Afar D, A
Mack DH,
                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                               ADN38984;
                                                                                                                                                                                                                                                                             ADN38984
                                                                                         엄
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                      à
                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 IVWINGTHVIYKKDIRYKLLGDLSRRDVSLIIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTWSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTMSIPTTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes an isolated human NOVX polypeptide, where X is la to 1d or 2a to 2h, or its mature form, a sequence that is at cleast 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents human NOV1b from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MHPQVVILSLIIHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rastelli L, Smithson G, Mesri M;
Giot L, Starling G;
                                                                                                                                                                                                                                                                                                                        cytostatic; antiinflammatory; gene therapy; vaccine; inflammation; tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.3%; Score 1684; DB 7; Length 359; 100.0%; Pred. No. 3.7e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 4; 239pp; English.
Z
                                                                                                                                         ADE36594 standard; protein; 359
                                                                                                                                                                                                                                                                           Human NOV1b protein SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tse K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-2003; 2003WO-US008490.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rieger DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-876927/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADE36593.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003080856-A2.
                                                                                                                                                                                                                                                                                                                        human; NOVX; c
renal cancer;
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lepley DM,
                                                                                                                                                                                   ADE36594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                         ADESULT 8
ADES 594
ADES 594
ADES 594
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
AC ADES
A
```

g

ઠે

ò

셤 ò 음

ð

```
of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, antibodies and methods are useful for diagnosing, prognosing and treating antibodies and other conditions such as psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal necvascularistaion syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                         IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                            61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTWS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                                                                                                                                                                                                                                                                                         1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITSVPITISIPITISVPVITITVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                      Length 359;
                                                                                                                                                                                                                                                                                    96.3%; Score 1684; DB 7; Length 3 100.0%; Pred. No. 3.7e-113; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                      sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. 20
/label= Signal_peptide
65. 67
/note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            258. .260
/note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272. .274
/note= "N-glycosylated"
286. .288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human kidney injury molecule-1 (KIM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VLLALLGVIJAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 VLLALLGVIIAKKYPFKKBVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ76690 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                 Matches 323; Conservative
                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                       Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADQ76690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (199 I cell and mucin domain (TIM) family. This protein has 344 amino acids and member of the T cell immunoglobulin (199 I cell and mucin family amily. This protein has 344 amino acids depending on splice variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the interaction of T cells and other immune system cells, e.g. dendritic cinteraction of T cells and other immune system cells, e.g. dendritic cinteraction by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor reduces secretion of interferon-gamma by immune cells engaged in an antigen response in the mixed lymphocyte response assay. Based on these cills contained in autoinmune disease and other disorders of the mammalian immune system. A method is claimed for inhibiting cell, in a mammal. The method involves identifying a mannel with an immune disease or disorder, or one preparing to receive a tissue graft, and administering a KIM-1 antagonist, especially a polypeptide comprising a KIM-1 antagonist, especially a polypeptide comprising a KIM-1 antagonist, especially a polypeptide comprising a comprising a mati-KIM-1 antibody. Preferably, the KIM-1 antagonist is a coluble polypeptide, which can include a heterologous moiety such as an FC couple polypeptide, which can include a heterologous moiety such as an FC couple polypeptide and gomain, and may include a heterologous moiety such as an FC couple polypeptide which can include a heterologous moiety such as an FC couple polypeptide and gomain, and may include a heterologous moiety such as an FC couple polyment glycol. The KIM-1 antagonist is used in method sease relapse cinhibiting activation of a B cell in a mannel. The antagonist and disease conjugated disease (Grave's disease; treating a FL andar disease (Grave's disease; treating a FL andar disease (Grave's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MHPQVVILSLILHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG 60
                                                                "C-terminal region unique to this splice variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             idiopathic thrombooytopenia purpura, Wegener's granulomatosis, polyarteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of
                                                                                                                                                                                                                                                                                                                                                                                                                                Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Transmembrane domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.3%; Sco...
100.0%; Pred. No. 5...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 1; 68pp; English.
                                                                                                                                                                                                    29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                                 30-DEC-2002; 2002US-0436934P
                                                                                                                                                                                                                                                                                               (BIOG-) BIOGEN IDEC MA INC.
  290. .311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 323; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IFN-gamma by lymphocytes.
                       /note=
                                                                   /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      one or more antigens.
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-534277/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                              WO2004060041-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                            Rennert PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Domain
                                             Region
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

```
N-PSDB; ABZ68335.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                        Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcintire JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-JAN-2003
                                                                                                             Matches 322;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABP70441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABP70441
  ž S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8822282828282821111111222228888282628
                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM 3 and TIM-4. TIM polypeptides are cell surface molecules with conserved gy and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM genetically associated with immune dysfunction, including asthma. The TIM commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway associated with protection against these responses. T cells express TIM preferentially express TIM-3, which critically regulate CD4 T cell differentiation. Thi cells preferentially express TIM-3, while TH2 cells preferentially express TIM-1. TIM polypeptides and polymoclades are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                          180
                                                                                                                  SLEIVPPKVTTTPIVTTVPTVTVRTSTTVPTTTTVPTTTVPTTWS1PTTTTVPTTWTVS 180
                                                                                                                                                                                       240
                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                            241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                  TITSVPTITSIPITITSVPVITIVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                            SLEIVPPKVITTPIVITVPTVTTVRTSTTVPTTTVPTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                                                                                       TITSVPITISIPITISVPVITITVSTFVPPMPLPRQNHEPVAISPSSPQPAETHPTILQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immunoglobulin dysfunction; chromosome 5; malignancy; allergy; eczema; mwglodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                      VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                              VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABP70439 standard; protein; 359 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 10; Page 82; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcintire JJ, Dekruyff RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; ABZ68333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                        121
                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP70439;
                                         61
                                                                                                                                                                                    181
                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11

XX ABP70439

1D X2-AF

XX ABP70639

DT 22-AF

DE 22-AF

DE 22-AF

DE 22-AF

DE 22-AF

DE 22-AF

DE Aminc

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

XX MO206

                                                                                                                                      셤
                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                           g
                                    ద
                                                                                          ò
                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                          120
                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                               9
                                                                                      9
                                                                                                                                                                                                                                                                                       121 SLEIVPPKVTTTPIVTTVTVTVTVTSTTVPTTTTVPTTTTVPTTMSIPTTTVPTTMTVS
                                                                                                                 1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                          61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                   61 IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTMSIPTTTTVPTTMTVS
                                                                                                                                                                                                                                                                                                                                                       TTTSVPTTTS1PTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGA
                                                                                                                                                                                                                                                                                                                                                                             T cell immunoglobulin domain; mucin domain; TIM.1; TIM.2; TIM.3; TIM.4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                    1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kuchroo V;
                                             ö
    Length 359;
                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freeman GJ,
Score 1679; DB 6;
Pred. No. 8.5e-113;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amino acid sequence of human TIM-1 allele 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "encoded by GACT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note= "encoded by GCA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "encoded by ART"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ē
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABP70441 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-2002; 2002WO-US020890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUN-2001; 2001US-0302344P.
  96.0%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dekruyff RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference 240
                      Similarity
```

Kuchroo V;

Freeman GJ,

Umetsu DT,

```
The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM preferentially express TIM-2, while TLM cells preferentially express TIM-3, while TLM cells preferentially express TIM-3, while TLM cells preferentially express TIM-1. TIM polypeptides and polymucleotides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                          (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                         Claim 10; Page 83-84; 94pp; English
                                                                                        01-JUL-2002; 2002WO-US020890.
                                                                                                                         29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                             Mcintire JJ, Dekruyff RH,
                                                                                                                                                                                                                                2003-210268/20.
                                                                                                                                                                                                                                                N-PSDB; ABZ68334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 365 AA;
                    WO2003002722-A2
                                                     09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
ABP70442
ID ABP7
XX
AC ABP7
 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                  The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptides. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is senetically associated with immune dysfunction, including asthma. The TIM gene family is located with immune dysfunction, including asthma. The TIM commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants hyperteactivity and allergic T cell responses, and other variants protection against these responses. T cells express TIM protection, which critically regulate CD4 T cell differentiation. Thi cells preferentially express TIM-1 and polymologogides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLEIVPPKVITTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 IRREPTSSPLYSYTTDGNDTVTESSDGLWSNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                  T cell Immunoglobulin domain and treating cancer or asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCMNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITSVPITISIPITISVPVITITVSIFVPPMPLPRQNHEPVAISPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                            Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1,
                                                                                                                                                                                                                                                                                                                                                                                                                            95.5%; Score 1671; DB 6; 99.1%; Pred. No. 3.2e-112; ive 2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amino acid sequence of human TIM-1 allele 3.
              New nucleic acid comprising a mammalian Mucin domain gene sequences, useful for allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "encoded by RCG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VLLALLGVIIAKKYFFKKGVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                    Claim 10; Page 84-85; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABP70440 standard; protein; 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.1
Matches 320; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference 208
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABP70440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

```
240
                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                   174
                                                                                                                                                                                                                                                                                                                             121 SLEIVPPKVITTPIVITVPTVTTVRISTTVPTTTTVPMTTTVPTTTVPTTMSIPTTTVP 180
                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKGIYAG 300
                                                                                                   9
                                                                                                                                                 9
                                                                                                                                                 1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                               61 IVWINGTHVIYRKDIRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                   SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPT-----TTTVPTTTVPTTMSIPTTTVP
                                                                                                                                                                                                                                                                                                                                                                                                                                             TTMTVSTTTSVPTTTSIPTTTSVPVTTAVSTFVPPMPLPRQNHEPVATSPSSPQPAETHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAG
                                                                                                   1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                               TIMIVSTITISVPITISI PITISVPVITITVSTFVPPMPL PRQNHE PVATSPSS PQPAETHP
                                                   Gaps
                                                   . 9
     Length 365;
                                                   Indels
/ Match 95.3%; Score 1666; DB 6; Local Similarity 97.9%; Pred. No. 7.5e-112; nes 322; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 VCISVLVLLALLGVIIAKKYFFKKEVQQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP70442 standard; protein; 364 AA
                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                  175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABP70442
```

Page 10

```
The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is conserved IgV associated with immune dysfunction, including asthma. The TIM genetically associated within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperractivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM protections, which critically regulate CD4 T cell differentiation. This cells preferentially express TIM-3, while Th2 cells preferentially express TIM-1. TIM polypeptides and polynucleotides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTLQCAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKGIYAG 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIMITOSTITISVPITITSIP-TISVPVITITVSTFVVPPMPLPRQNHEPVATSPSSPQPAETHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPT-----TTTVPTTTVPTTTWSIPTTTVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SLEIVPPKVTTTPIVTTVFTVFTVFTSTTVPTTTTVPMTTTVPTTTVPTTTVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIMTVSTITSVPITISI PITISVPVITIVSTFVPPMPLPRQNHEPVATSPSSPQPAETHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MHPQVV1LSL1LHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                            TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema;
myelodysplastic syndrome; airway hyperreactivity; cancer; asthma;
allergic T cell response; autoimmune disease.
                                                                                          mucin domain; TIM; TIM-1; TIM-2; TIM-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94.7%; Score 1655.5; DB 6; Length 364; 97.9%; Pred. No. 4.3e-111; tive 0; Mismatches 0; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                   Freeman GJ,
                                                   Amino acid sequence of human TIM-1 allele 5.
                                                                                                                                                                                                                                                                                                                                                                                                                   Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                           (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 10; Page 86-87; 94pp; English.
                                                                                            T cell immunoglobulin domain;
                                                                                                                                                                                                                                                                                                     01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                          29-JUN-2001; 2001US-0302344P
                                                                                                                                                                                                                                                                                                                                                                                                                   Dekruyff RH,
               22-APR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 97.9
Matches 322; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; ABZ68336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 364 AA;
                                                                                                                                                                                                                            WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                   Mcintire JJ,
                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                               09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

```
The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated with immune disfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway chyperractivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM proteins, which critically regulate CD4 T cell differentiation. This cells preferentially express TIM-3, while Th2 cells preferentially express TIM-3, while Th2 cells preferentially express TIM-1. TIM polypeptides and polynucleotides are useful for treating cancer, asthma, allergies, eczeme or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gane sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                           T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response, autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freeman GJ,
                                                                                                                                                                                                                                          Amino acid sequence of human TIM-1 allele 6.
323
                   300 VCISVLVLLALLGVIIAKKYFFKKEVQQL 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "encoded by ACAAGT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "encoded by GACT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "encoded by GAG"
295 VCISVLVLLALLGVIIAKKYFFKKEVQQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 10; Page 87-88; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                              ABP70443 standard; protein; 364 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2002; 2002WO-US020890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcintire JJ, Dekruyff RH,
                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; ABZ68336.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                       22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-JAN-2003.
                                                                                                                                                                  ABP70443;
                                                                                                                                                 g
```

3

Gaps

7;

Length 364; Indels

DB 6;

94.0%; Score 1643.5; DB 6, 97.3%; Pred. No. 3.1e-110; ive 1; Mismatches 1;

Best Local Similarity 97.3 Matches 320; Conservative

Similarity

Query Match

Š

120 174 180 234 239

9 9

Gaps

```
121 SLBIVDPKVTTTPIVTTVPTVTTSTVPT-----TTTVPTTVPTTVPTTTVP 174
                     4 8 4 8 4 8 4 8 4
                                      셤
```

Search completed: June 29, 2005, 09:09:08 Job time: 238.54 secs

THIS PROFE BLANK HIS TO'

```
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                            Name=hHAVcr-1;
                                                                                                                                                                                                                                                                                                                               TISSUE=Liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
                                                                                                                                                                                                  043656
                                                                                                                                                                              RESULT 1
043656
                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                          043656 homo sapien 095642 homo sapien 095644 cercopithec 018984 cercopithec 04559 cercopithec 04559 cercopithec 04559 cercopithec 04559 cercopithec 04559 cercopithec 04590 mus musculu 080400 mus musculu 080400 mus musculu 060173 mus musculu 060173 mus musculu 060173 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 06174 mus musculu 066174 drosophila 1060740 mus musculu 06674 xenopus lae 076184 streptococc 77667 xenopus lae 07667 xenopus lae 07667 xenopus lae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  xenopus lae
drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                avian adeno
                                                                    (without alignments)
1277.688 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                         June 29, 2005, 08:57:16 ; Search time 133.862 Seconds
                                                                                                                   1 MHPQVVILSLILHLADSVAG.....FFKKEVQQLRPHKSCIHQRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08ww60 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9w4m2
                                                                                                                                                                                         1612378
5.1.6
Compugen Ltd.
                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                    1612378 segs, 512079187 residues
 version 5
                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QBIR74
MUCI XENLA
Q76HB4
MUAI XENLA
Q9W4M2
Q8WW60
                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                       protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               061NH8
096H15
09VIM0
07TQ03
096K94
08TDQ0
                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                       Q96D42
Q95144
O18984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28VBW0
                                                                                                                                                                                                                                                                                                                                                                                                                                                             046597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       273347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           054947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27TPU2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28CIC7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28R183
 GenCore (c) 1993
                                                                                                                                                                                                                                                                            UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                          seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                US-10-718-321-7
1749
                                                                                                                                                                                                                                                                                                                                                                                Query
Match Length
          Copyright
                                                                                                 Title:
Perfect score:
                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                        1303.5
1288
1288
1286
1286
522.5
519
491.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                       OM protein -
                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                     Sequence:
                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                               Database
                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                              Result
```

•	Q25333 leishmania		O18510 trichoplusi										
Q7YTR7	025333	Q28501	018510	018511	096503	MUC2 HUMAN	Q253 <u>3</u> 4	Q6UN14	Q26878	09VN36	099322	Q9VR49	Q27423
(4	~	~	N	~	~	Н	~	N	N	N	~	N	N
519	371	216	788	807	1832	5179	327	627	197	559	294	1225	232
13.4	13.4	13.1	13.1	13.1	13.0	13.0	12.6	12.5	12.5	12.4	12.4	12.3	12.3
235	234	229	229	229	227.5	226.5	219.5	219	218	217	216.5	216	215
32	33	34	35	36	37	38	39	40	41	42	43	44	45

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITSVPTITSIPIIITSVPVIITVSTFVPPMPLPRONHEPVAISPSSPQPAEIHPIILQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MHPQVVILSLIIHLADSVAGSVKVGGRAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 IVWTNGTHVTYRKOTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITSVPITISI PITISVPVITIVSIFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-89325180; PubMed-9658108;
Feigelstock D., Thompson P., Mattoo P., Zhang Y., Kaplan G.G.;
"The human homolog of HAVcr-1 codes for a hepatitis A virus cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96.3%; Score 1684; DB 2; Length 3 100.0%; Pred. No. 5.1e-101; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359 AA; 38704 MW; C207FEC562DC62CA CRC64;
                                                                                                                                                                                                             06, Last sequence update)
26, Last annotation update)
                                                                                                                                359 AA
ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor.";
J. Virol. 72:6621-6628(1998).
BMBL; AP043724; AAC39862.1;
GO; GO:0004972; F.receptor activity; IEA.
InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                              01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last seque
01-MAR-2004 (TrEMBLrel. 26, Last annot
Hepatitis A virus cellular receptor 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMARY; SM0409; IG; 1.
PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similario,
Matches 323; Conservative
                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

```
Matches 255; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SLEIVPPKV----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          095144;
01-FEB-1997
01-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                          121
                                                                                                                                                                            176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     095144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
                                                                                                                      셤
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Kidney;

WEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

X Strausberg R.L., Feringold E.A., Grouse L.H., Derge J.G.,

Altachul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,

Altechul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,

Altechul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jorden H., Moore T., Max S. I., Wang J., Hsieh F.,

A Diatchenko L., Marusina K., Parmer A.A., Rubin G.M., Hong L.,

A Raha S.S., Loquellanno N.A., Peers G.J., Abramson R.D., Mullahy S.J.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raba S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Falbey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.

Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rabes ley R.W., Touchman J.W., Green B.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Jones S.J., Marra M.A.,

RA Jones S.J., Marra M.A.,

RA Jones S.J., Marra M.A.,

RA "Generation and initial analysis of more than 15,000 full-length human
241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ebert L., Schick M., Neubert P., Schatten R., Henze S., Korn B.; Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC013325; AAH13325.1; -.
EMBL; CR457114; CAG33395.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95.0%; Score 1661.5; DB 2; Length 364; 98.2%; Pred. No. 1.5e-99; ive 0; Mismatches 1; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR003599; IG.
InterPro; IPR007110; Ig-like.
InterPro; IPR007110; Ig-like.
SMART; SM00409; IG; 1.
PR0SITE; PS50835; IG; LIKE; 1.
PROSITE; PS500290; IG MHC; UNKNOWN 1.
SEQUENCE 364 AA; 39249 MW; AA67C7DC7PAC81F1 CRC64;
                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                             364 AA
                                                                          301 VLLALLGVIIAKKYFFKKEVQQL 323
                                              301 VLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                      01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 25-OCT-2004 (TrEMBLrel. 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genew; HGNC:17866; HAVCR1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 98.2
Matches 322; Conservative
                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                 HAVCR1 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                              Name=HAVCR1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                    Q96D42
                                                                                                                                                                                                                           096D42
                                                                                                                                                                          RESULT 2
Q96D42
                                                                                               g
                                                                                                                                                                                                                           HID BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BERRY BE
                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à,
```

```
<u>ښ</u>
                                                                                    175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                241 TLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTOLFLEHSLLTANTTKGIYAGV
                                                                                                                                                                                                                                181 TWIVSTITSVPTITISIPITITSVPVTITVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MHIQVVILSLILHLADSVADSVAVDGVAGLSITLPCRYNGAITSMCWNRGTCSVFSCPDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 SLBIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPMTTVPPTTTVPTTMSIPTTTVLT
                                                                                                                                                                                            TMTVSTTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPT
                                                                                                                                                                                                                                                                                                  236 TLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---TTTPIVTTVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SLKIGÞÞRVTTPIVRTVRTSTTVPTTTTLPTTTTLPTTTTLPTTTTLPMTTTLDMTTTLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140 TVTTVRTSTTVPTTTTVP-------TTTVPTTMSIPTTTTVPTTMTVSTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Identification of a surface glycoprotein on African green monkey kidney cells as a receptor for hepatitis A virus.";
EMBO J. 15:4282-4296(1996).
EMBL; X98252; CAA66906.1; -.
PIR; S71754; S71754.
Interpro; IPR00710; Ig-1ike.
InterPro; IPR007100; Ig-1ike.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kaplan G., Totsuka A., Thompson P., Akatsuka T., Moritsugu Y., Feinstone S.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2; Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
HAVCr-l protein precursor.
Cercopithecus acthiops (Green monkey) (Grivet)
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Butelec
Mammalia; Butheria; Primates; Catarthini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74.8%; Score 1309; DB 2; Length 4 63.3%; Pred. No. 1e-76; ive 36; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    451 AA; 48774 MW; 5D395C5455AA4332 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           451 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                  301 CISVLVLLALLGVIIAKKYFFKKEVQQL 328
                                                                                                                                                                                                                                                                                                                                                                                                       296 CISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IISSUE=Kidney;
MEDLINE=97015129; PubMed=8861957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
61 IVWTINGTHVITYRKETRYKLLGNLSRRDVSLTIANTAVSDSGIYCCRVQHSGWFNDMKITI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 TILPITITEPITITEPITEPIMEPPITITEPITMILEPITMITEPITMITEPITTITEPITTILEPITTILEPITTILEPITTILEPITTIM 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-98285791; PubMed=9621093; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4."; J. Virol. 7:5218-6221992 (1998).

EMBL, AF043446; AAC3971.1; G.G. GO:0004872; Freceptor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||:||||:||
121 SLKIGPPRVTTPIVRTVRTSTTVPTTTTTTTPPTTTTLPTTTTLPTTTTPPTTTTLPMTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   131 ----TTPIVTTVPTVTTVRTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            148 TTVPTTTTVP-TTTVP-TTTVPT----TMSIPTTTVPTTTVPTTMTVSTTTSVPTTTSIPTTSVPVTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQ
272 NOTQLFLEHSLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mamalia, Butheria, Primates, Catarrhini, Cercopithecidae, Cercopithecinae, Cercopithecinae, Cercopithecinae, Cercopithecinae, Cortopithecinae, Cercopithecinae, C
                                            361 NQTQLSPEHSPQMVNTTEGIYAGVCISVLVLLAVLGVVIAKKYFFKKEIQQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  469 AA; 50561 MW; 27E386F47948F528 CRC64;
                                                                                                                                                                                                                                                                                                                                        05-UUL-2004 (TrEMBLrel. 27, Created)
05-UUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hepatitis A virus cellular receptor 1 short form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73.6%; Score 1288; DB 2; 59.9%; Pred. No. 2.5e-75; iive 39; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cercopithecus aethiops (Green monkey) (Grivet)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 59.9%; Pred. No. 2.5e
Matches 252; Conservative 39; Mismatches
                                                                                                                                                                                                                                                                           469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 SLEIVPPKVT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN 1.
                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR003599; IG
InterPro; IPR007110; IG-11ke.
InterPro; IPR03006; Ig_MHC.
SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                g
    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                          280
                                                                241 TTLPITTLPIMTLPITTTLPIMMTLPITTTLPITTTTLPITTMVSTFVPPTPLPMQNHEPV 300
                                                                                                                                                                                                                                                               301 ATSPSSPQPAETHPVTLLGATRTQPTSSPLYSYTTDGSDTVTESSDGLWNNNQTQLSPEH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 IVWTNGTHVTYRKETRYKLLGNLSRRDVSLTIANTAVSDSGIYCCRVQHSGWFNDMKITI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SLEIVPPKV-----------TTTPIVTTVPTVTTVRTSTTVPTTTVP---- 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 LPTTTTVPTTTTLPTTLPTTTLPTTTLPTTTLPTTLPTTTLPTTTLPTTMTLPMTTTLPTMTTL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221 ATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGBAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [1] SEQUENCE FROM N.A. MEDLINE-97368416; PubMed=9225030; ABAbida M., Hamada C.; "Molecular cloning of the hepatitis A virus receptor from a simian "Molecular cloning of the hepatitis A virus receptor from a simian "Molecular cloning of the hepatitis A virus receptor from a simian "Molecular cloning of the hepatitis A virus receptor from a simian "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning" and "Molecular cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-JAN-1998 (TrEMBLrel. 26, Last annotation update)
Hepatitis A virus receptor.
Cercopithecus aethiops (Green monkey) (Grivet)
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 460;
                                                                                                                                                                                                                                                                                                                                                                                     SPOWVNTTEGIYAGVCISVLVLLAVLGVVIAKKYFFKKBIQQL 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33; Indels
                                                                                                                                                                                                                                                                                                                                            281 SLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              460 AA; 49687 MW; 1D1A0C1D832139EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74.5%; Score 1303.5; DB 61.9%; Pred. No. 2.4e-76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 255; Conservative 35; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; D88585; BAA21556.1; -. 600, G0:0040872; F:receptor activity; IEA. InterPro; IPR003599; Ig. InterPro; IPR007110; Ig-like. InterPro; IPR007106; Ig-like. SMRAT; SM00409; IG; I. PROSITE; PS50835; IG_IKE; I. PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell line.";
J. Gen. Virol. 78:1565-1569(1997)
EMBL; D88585; BAA21556.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O18984;
01-JAN-1998 (TrEMBLrel.
01-JAN-1998 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        018984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 984

10 9
                                                                                                                                                                                                                                                   g
                                                                                     셤
                            ઠે
                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

'n

98; Gaps

9 9 262

360 322

180 147 240 202 420

```
318 KEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEIQÓL 425
                                                                                                                                                                                                                                                    NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
073347
                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   쇰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                     MEDLINE=98285791; PubMed=9621093;
MEDLINE=98285791; PubMed=9621093;
Peigelatock D., Thompson P., Mattoo P., Kaplan G.G.;
Pelgelatock D., Thompson P., Mattoo P., Kaplan G.G.;
Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
GO; GO:0004872; F:receptor activity; IEA.
InterPro; IPR003199; Ig.
InterPro; IPR00110; Ig-like.
InterPro; IPR003109; Ig-like.
SMART; SM00409; IG; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66 IVWTNGTHVTYRKETRYKLIGNLSRRDVSLTIANTAVSDSGIXCCRVQHSGWFNDMKITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 246 TILPITITEPITITEPITITEPIMIEPITITEPITITEPITIMIEPITITEPITITEPITITEPITITEPITITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 MHLQVVILSLILHLADSVADSVAVDGVAGLSITLPCRYNGAITSMCWHRGTCSVFSCFDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IVWINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ----TTPIVTTVPTVTTVRTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTVPTTTTVP-TTTVPT----TMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSVPVTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98; Gaps
                                                                                                                                                                                                                            Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73.6%; Score 1288; DB 2; Length 474; 59.9%; Pred. No. 2.5e-75; ive 39; Mismatches 32; Indels 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     474 AA; 51088 MW; 472DF987CA220524 CRC64;
                                                                                                                       01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hepatitis A virus cellular receptor 1 long form.
                                                                                 474 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN_1.
                                                                                 PRT;
                                                                                                                                                                                                                                                                                              Cercopithecinae; Cercopithecus.
NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 SLEIVPPKVT------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 252; Conservative
                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L 323
                                                                                                                                                                                                               Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                 046597
                                   RESULT 6
046597
                                                                                   DDT THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF THE SERVICE OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

RESULT :

```
ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 IVWTNGTHVTYRKDTRYKLIKGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            138 VPTVTTVRTSTTVPTTTTVPTTTWPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTSV 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258 NDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFK 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                               MEDLINE=98285791; PubMed=9621093;
MEDLINE=98285791; PubMed=9621093;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Reigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
G., Steen monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
J. Virol. 72:6218-6222(1998).
G., School A., Steeptor activity; IEA.
InterPro; IRR003599; Ig.
InterPro; IRR007110; Ig-like.
InterPro; IRR003006; Ig-MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 LPTTTLPTTTLPTTTLPTTTLP-TMTLPTTTTLPTTMTLPMTTTLPTTTTLPTTTTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 IV#TNGTHVTYRKETRYKLLGNLSRRDVSLTIANTAVSDSGIYCCRVQHSGWFNDMKITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300 PITIMVSTFVPPTPLPMQDHEPVATSPSSAQPAETHPVTLLGATRTQPTSSPLYSYTTDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 SLKIGPPRVTTPIVRTVRTSTTVPTTTTTTLPTTTTLPTTTLPTTMTLPTTTTLPMTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PVTTTVSTFVPPMPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 3.5%; Score 1286; DB 2; Length 473; Similarity 58.9%; Pred. No. 3.3e-75; 11; Conservative 38; Mismatches 33; Indels 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          473 AA; 50973 MW; CD15EF5EE79C8013 CRC64;
                       ©70J47;

05-JUL-2004 (TrEMBLrel. 27, Created)

05-JUL-2004 (TrEMBLrel. 27, Last sequence update)

05-JUL-2004 (TrEMBLrel. 27, Last annotation update)

05-JUL-2004 (TrEMBLrel. 27, Last annotation update)

Name-HAVCT-1;

Cercopithecus aethiops (Green monkey) (Grivet).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  478 AA
473 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMARY; SM0409; IG; 1.
PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 SLEIVPPKV-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               046598
046598;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
046598
ID 04659
AC 04659
```

```
Kidney injury molecule-1 (KIM-1 protein)
                                                                                                                                                                                                                                                                                                         cells after injury."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                             NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
      DDR BER RESERVED BY SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDER SEA STANDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IVWTINGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFINDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66 IVWINGTHVTYRKETRYKLLGNLSRRDVSLIIANTAVSDSGIYCCRVQHSGWFNDMKIII 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126 SLKIGPRVTTPIVRTVRISTTVPTTTTTLPTTTLPTTTLPTTMTLPTTTLPMTTT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138 VPTVTTVRTSTTVPTTTVPTTTWPTTMSIPTTTTVPTTMTVSTTTSVPTTTSIPTTTSV 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDG 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PITTMVSTFVPPTPLPMQDHEPVATSPSSAQPAETHPVTLLGATRIQPTSSPLYSYTTDG 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258. NDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVLVLLALLGVIIAKKYFFK 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 MHLQVVILSLILHLADSVADSVADSVAGELSITLPCRYNGAITSMCWHRGTCSVFSCPDG 65
                                                                                                                                                                                                                                                                            Peigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Peigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4."; J. Virol. 72:5218-5221(1998). EMBL, AF043449; AAC39774.1; GG. GO:0004872; Pireceptor activity, IRA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MHPQVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYSGAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TIVITIVIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                    Cercopithecus aethiops (Green monkey) (Grivet).
Wakaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33; Indels 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    478 AA; 51501 MW; 3A919655C752FF60 CRC64;
                    01-JUN-1998 (TrEMBLrel. 06, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update) Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Score 1286; DB 2;
; Pred. No. 3.4e-75;
38; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307 AA
                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR003599; IG.
InterPro; IPR007110; Ig-like.
InterPro; IPR007010; Ig-like.
SMART; SM0409; IG; ILIKE;
PROSITE; PS00290; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN_1.
                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=98285791; PubMed=9621093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SLEIVPPKV-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73.5%;
58.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 251; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEIQQL 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                            NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      054947;
01-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  054947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
054947
ID 0549-
AC 0549-
DT 01-JI
DT 01-JI
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

Last sequence update)
Last annotation update)

Created)

(TrEMBLrel. 06, C (TrEMBLrel. 06, I (TrEMBLrel. 27, I

01-JUN-1998 05-JUL-2004

```
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
A trausberg R.L., Feingold B.A., Grouse L.H., Derge J.G.,
A trausper R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,
A Altschul S.F., Zeeberg B. Buetow K.H., Schaefer C.F., Bhat N.K.,
A Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Heibeh F.,
B ditchenko L., Marushia K., Farmer A.A., Rubin G.M., Hong L.,
A Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
B rownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
B Bosak S.A., McKwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
A kichards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Multing M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Multing M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakeeley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., Marra M.A.,
Jones C.M., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEIVPPKVITIPIVITVPTVTTVRISTTVPT--TTTVPTTTVPTTMSIPTTTVPTTMTV 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180 STITSVPITISIPITISVPVITIVSIFVPPMPLPRQNHEPVATSPSSPQPAETHPITLQG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Kidney injury molecule-1 (KIM-1), a putative epithelial cell adhesion molecule containing a novel immunoglobulin domain, is up-regulated in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 QVFISGLLLLLLPGSVDSYEVVKGVVGHPVTIPCTYSTRGGITTTCWGRGQCPYSSCQNIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 QVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS--GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92
                                                                                                                                                                                                                                                                                                              STRAIN=Sprague-Dawley; TISSUE-Kidney;
MEDLINE=99129827; PubMed=9461608; DOI=10.1074/jbc.273.7.4135;
Cichimura T., Bonventre J.V., Bailly V., Wei H., Hession C.A.,
Cate R.L., Sanicola M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 307;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LE-VKPEIPTSP-------PTRPTTRPTTTRPTTIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg R.;
Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AF035963; AACS3546.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 307 AA; 33963 MW; 736D1DD1F1549760 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29.9%; Score 522.5; DB 2; 39.4%; Pred. No. 4.2e-26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 39.4%; Pred. No. 4.2e-
Matches 128; Conservative 39; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Biol. Chem. 273:4135-4142(1998).
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; BC061820; AAH61820.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

φ

g ò g

```
62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           172 ---PTSTHTWTHKPDWNGTVTSSGD-TWSNHTEA--IPPGKPOKNPTKGFYVGICIAALL 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242 RREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVLV 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 QVFISGLILLLEPGAVDSYVEVKGVVGHPVTLPCTYSTYRGITTTCWGRGQCPSSACQNTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------BIPTRPPRKPTTTRPTATGRPT-------TIST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 QVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS--GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Blastocyst;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
                                                                                                                                       Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata, Vertebrata, Buteleostomi,
Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28.1%; Score 491.5; DB 2; Length 36.6%; Pred. No. 3.9e-24; rive 32; Mismatches 88; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PS50835; IG_LIKE; 1.
282 AA; 30968 MW; 7D30EE0698F0AC5F CRC64;
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 156 -----RSTHVPTSTRVSTSTP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GO; GO:0005615; C:extracellular space; TAS. GO; GO:0016021; C:integral to membrane; TAS. SMART; SMO0409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302 LLALLGVIIAKKYFFKK 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               226 LLLLVSTVAITRYILMK 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata;
Mammalia; Butheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-0CT-2003 (TrEMBLrel. 25, 01-0CT-2003 (TrEMBLrel. 25, 01-MAR-2004 (TrEMBLrel. 26, Maypothetical protein. Mus musculus (Mouse).
(TrEMBLrel. 20, TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                  Name=Havcrl;
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125 LQVKP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Simil
Matches 116; (
                          01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q7TPU2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
  SO DR REFERENCE OF SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE SO DE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITSVPITITSIPITITSVPVITITVSIFVPPMPLPRQNHEPVATSPSSPQPABTHPTILQGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
AIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISV 299
                                ---AEVTETPSYT--PADWNGTVT-SSEEAWNNHTVRIPLRKP--QRNPTKGFYVGMSVAA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTTMSIPTTT-VPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----- 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

STRAIN=BALB/C; TISSUB=Spleen;

MEDLINE=21882130; PubMed=11725301;

MCINLire J.G., Umetus G.E., Akbari O., Potter M., Kuchroo V.K.,

Barsh G.S., Freeman G.J., Umetsu D.T., DeKruyff R.H.;

"Identification of Tapp (an airway hyperreactivity regulatory locus)

"Identification of Tapp (an airway hyperreactivity regulatory locus)

"In minnol. 2:1109-1116(2001)."

"Nat. Immunol. 2:1109-1116(2001)."

"MGD; MGI:2129609, Havori."

GO; GO:0016021; C:extracellular space; TAS.

GO; GO:0016021; C:integral to membrane; TAS.

RMART; SM00409; IG; 1.

RROSITE; PSS0835; IG LIKE; 1.

SEQUENCE 305 AA; 33391 MW; 8F4EA38627FEBSFB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QVFISGLILLIPGTVDSYVEVKGVVGHPVTLPCTYSTYRGITTTCWGRGQCPSSACQNTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125 LOVKP------EIPTRPPTRPTTTRPTATGRPTT-----ISTRSTHVPTSIRVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 IRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 QVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS--GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name-Havcrl;
Nus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29.7%; Score 519; DB 2; Length 305; 40.6%; Pred. No. 7e-26; ive 34; Mismatches 95; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168 İSTP-PISTH--TWTHKPEPT---TPCP------
                                                                                                                                                                                                                                                                                                                305 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             282 AA.
                                                                                                                                                LVLLALLGVIIAKKY-FFKKEVQQL 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QBVIM1 PRELIMINARY; PRT; QBVIM1; 01-MAR-2002 (TrEMBLrel. 20, Created)
                                                                                                                                                                                                                                                                                                                                                                           Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VLLALLGVIIAKKYFFKK 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LLLLLVSTVAITRYILMK 265
                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 20, (TrEMBLrel. 20, 1 (TrEMBLrel. 26, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 129; Conservative
                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                        01-MAR-2002
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                        192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                300
                                                                                                                                                                     245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                   OBVIM2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
QBVIM1
ID QBVIM
AC QBVIM
DT 01-MA
                                                                                                                                                                                                                                                           RESULT 10
```

셤

ò 엄 ò 유

셤

ò

유

ò

ò

7

81;

SON SON SERVICE SERVIC

64 61

```
198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QBCIC
        셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Batchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Batchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Bata Stapleton M., Soares M.B., Bonaldo M.F., Carninci P., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Tochiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Guy L.J., Hulyk S.W.,

Nilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rakeley R.W., Touchman J.W., Green B.D., Dickson M.C.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Jones S.J., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length human

"Proc. Natl. Acad. Sci. U.S.A. 99:16993(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65 IWTNGHRVTYQKSSRYNLKGHISEGDVSLTIENSVESDSGLYCCRVEIDGWFNDQKVTFS 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----AIST 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182 TTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATSPSSPQPAETHPTTLQGAI 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             242 RREPISSPLYSYTIDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVLV 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---PTSTHTWTHKPDWNGTVTSSGD-TWSNHTEA--IPPGKPQKNPTKGFYVGICIAALL 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 VWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 LEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTTWPTTMTVST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS--GAVTSMCWNRGSCSLFTCQNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.8%; Score 486.5; DB 2; Length 282; 36.3%; Pred. No. 8.1e-24; Albarative 32; Mismatches 89; Indels 81
                                                                                                                                                                                                                                                                                                                             Strausberg R.; Strausberg R.; Strausberg R.; Submitted (UUN-2003) to the EMBL/GenBank/DDBJ databases. EMBL; BOSS1400; ARHS1400.1; -InterPro; IPR003599; Ig. InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                            SMART; SM00409; IG; 1.
PROSITE; PS50835; IG_LIKE; 1.
Hypothetical protein. 30938 MW; 6D31E2778480AC5F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125 LQVKP-----EIPTRPPRRPTTTRPTATGRPT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            305 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              156 -----RSTHVPTSTRVSTSTP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-Blastocyst;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LLALLGVIIAKKYFFKK 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLLLVSTVAITRYILMK 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. 20, 05-JUL-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=Timd2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QBVBW0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8VBW0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
Q8VBW0
     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
```

```
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 IVWTNGTHVTYRKDTRYKLLGDLSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 SLEIVPPKVTTTPIVTTVPTVTTVRTSTTVPTTTTVPTTTVPTTMSIPTTTVPTTMTVS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                237 LOGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S TIMINGYIVIHQRNSRYQLKGNISEGNVSLTIENIVVGDGGPYCCVVEIPGAFH--FVDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 OVVILSLILHLADSVAGSVKVGGEAGPSVTLPCHYS---GAVTSMCWNRGSCSLFTCQNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 TTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHEPVATS----PSSPQPAETHPTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Joxdan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C., Brownstein M.J., Wedlen N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
                                                              74; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
VCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                              Length 305;
                                                                                                                                                                                                                                                                                                                                                                                            Query Match 22.9%; Score 401; DB 2; Length 30 Best Local Similarity 33.5%; Pred. No. 2.9e-18; Matches 108; Conservative 48; Mismatches 92; Indels
                                                                                                                                                                                                                                                                                                                         PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 305 AA; 33519 MW; 68E69370FE23C9D0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2003 (TrEMBLrel. 23, Created)
1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
T-cell immunoglobulin and mucin domain containing 4
                                                                                                                                                                                                                              MGD; MGI:2159681; Timd2.
GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0016021; C:integral to membrane; TAS.
SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     238 IAALLILMLLSTWVITRYVVMK 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
SEQUENCE FROM N.A.
STRAIN=DBA/2, and BALB/c; TISSUE=S
MEDLINE=21582130; PubMed=11725301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

us-10-718-321-7.rup

```
signaling."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search cor
Job time
            232222222
822222222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81 SKCNAELLRTDGTRIISRKSTKYTLLGKVQFGEVSLTISNTNRGDSGVYCCRIEVPGWFN 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --TTAFSTAVTTCPSTT-PGSFSQETTKGSAFTTESET-----LPASNHSQRSMMTIST 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55 FICONGIUWINGIHVIYRKDIRYKLLGDLSRRDVSLIIENIAVSDSGVYCCRVEHRGWFN 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168 PTTTTVPTTMTVSTTTSVPTTTSIPTTTSVPVTTTVSTFVPPMPLPRQNHE-----PVAT 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            223 SPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW------NNNQT 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       251 DIAVLRPTGSNPGIL-----PSTSQLTTQKT----TLT-TSESLQKTTKSHQINSRQT 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DMKITVSLEI----VPPKVTTTPIVTTVPTVTTVRTS---TTVPTTTTVPTTTVPTTMSI 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 HPOVVILSLILHL----ADSVAGSVKVGGEAGPSVTLPCHY---SGAVTSMCWNRGSCSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 HEGLLILWLVTELWWLYLTPAASEDTIIGFLGQPVTLPCHYLSWSQSRNSMCWGKGSCPN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=BALB/c;
PubMed=14768054;
PubMed=14768054;
DOI=10.1002/eji.200324590;
Shakhov A.N. Rybtsov S., Tumanov A.V., Shulenin S., Dean M.,
Kuprash D.V., Nedospasov S.A.;
Ruprash D.V., Nedospasov S.A.;
"SMUCKLER/TIM4 is a distinct member of TIM family expressed by strom "SMUCKLER/TIM4 is a distinct member of TIM family expressed by strom cells of secondary lymphoid tissues and associated with lymphotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22.9%; Score 401; DB 2; Length 36
35.5%; Pred. No. 3.5e-18;
tive 40; Mismatches 114; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (UM-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC032879; AAH32879.1; -.
MGD; MGI:2445125; Timd4.
GG; GO:0016021; C:integral to membrane; TAS.
InterPro; IPR003599; IG.
InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 362 AA; 39846 MW; 29846B68C9822685 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                   and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  275 QLFLEHSLLTANTTKGIYAGVCISVLVLLALL 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ILII------ACCVGFVLMVLLFLAFL 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                343 AA
                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-Mammary gland;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 35.59
Matches 118, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Smuckler.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q6U7R3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
060778
AC 060778
AC 060778
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT 05-JU
DT
            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
12;
                                                                                                                                                                                                                                                                                                                                                                                                                   83 LSRRDVSLTIENTAVSDSGVYCCRVEHRGWFNDMKITVSLEI----VPPKVTTTPIVTTV 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           251 YSYTTDGNDTVTESSDGLW-----NNNQTQLFLEHSLLTANTTKGIYAGVCISVLVL 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196 SVPVTTTVSTFVPPMPLPRQNHE-----PVATSPSSPQPAETHPTTLQGAIRREPTSSPL 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----ACCVGFVLMVLLF 296
                                                                                                                                                                                                                                                                                                                                                                   89
                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                  PTVTTVRTS----TTVPTTTVPTTTWSIPTTTVPTTTVPTTMTVSTTTSVPTTTSIPTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           206 GSAITTESET-----LPASNHSQRSMMTISTDIAVLRPTGSNPGIL-----PSTSQL
                                                                                                                                                                                                                                                                                                                      26 GEAGPSVTLPCHY---SGAVTSMCWNRGSCSLFTCQNGIVWTNGTHVTYRKDTRYKLLGD
                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                         26;
                                                                                                                                                                                                                       Length 343;
                                                                                                                                                                                                                                                                         99; Indels
                                                                                                                                                                          DE26539A702887F3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253 TTQKT----TLT-TSESLQKTTKSHQINSRQTILII-----
                                                                                                                                                                                                                    Query Match 22.8%; Score 399; DB 2; Best Local Similarity 36.8%; Pred. No. 4.4e-18; Matches 112; Conservative 37; Mismatches 99,
EMEL, J. Immunol. 34:494-503 (2004).

EMEL, AY376717, AAR23484.1; -.

G0; G0:0016021; C:integral to membrane; TAS.

InterPro; IPR007519; Ig-1ike.

SMART; SM00409; IG; 1.

PROSTIE; PS50851; IG LIKE; 1.

SEQUENCE 343 AA; 37514 MW; DE26539A70288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             completed: June 29, 2005, 09:01:45
ne : 135.862 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             303 LALL 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LAFL 300
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

June 29, 2005, 08:57:16; Search time 3.79568 Seconds (without alignments) 1064.659 Million cell updates/sec

US-10-718-321-6_COPY_40_81

Title: Perfect score:

225 1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG 42 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		de			SUMMARIES	
Result No.	Score	Query Match	Length	DB	ΙD	Description
	178	79.1	451	2	871754	cellular hepatitis
2	62.5	27.8	639	7	S48959	
е	61.5	27.3	1269	7	A90267	proteinase related
4	9	26.7	602	7	A45769	
S	59	26.2	1254	Т	JQ1978	structural polypro
9	58	25.8	1254	ч	VHWVVE	structural polypro
7	58	25.8	1254	٦	VHWVVT	structural polypro
80	58	25.8	1255	Н	B44213	structural polypro
σ	58	25.8	1255	٦	D44213	structural polypro
10	57.5	25.6	405	7	H88930	protein R11G11.14
11	57	25.3	2399	7	H71879	toxin-like outer m
12	56.5	25.1	326	Н	VGXRER	qlycoprotein VP7 p
13	56.5	25.1	338	7	875217	N-acetylmuramoyl-L
14	56.5	25.1	1658	~	D86890	DNA-directed DNA p
15	99	24.9	472	7	S36519	L2 protein - human
16	55.5	24.7	322	N	T23891	٦
17	55	24.4	826	Н	T02753	S-receptor kinase
18	55	24.4	846	~	C82135	chitinase VC1952 [
19	54.5	24.2	189	N	B26659	T-cell receptor qa
20	54.5	24.2	205	0	B26425	receptor
21	54.5	24.2	213	~	T01715	hypothetical prote
22	54.5	4	285	N	G85016	probable myb-relat
23		4	304	~	S04663	T-cell receptor qa
24	54.5	24.2	323	7	S01895	T-cell receptor qa
25	54.5	24.2	386	7	A82284	ᆽ
56	•	24.2	639	0	A55019	muscarinic acetylc
27		24.2	923	~	E70820	hypothetical glyci
28	54	24.0	735	0	B83763	catalase BH0906 [i
59		24.0	891	7	T30812	ubiquitin-protein

probable membrane	hypothetical prote	conserved hypothet	ALK1 protein - yea	structural polypro	orf-Y protein - bo	F5D14.29 protein -	hypothetical prote	neu differentiatio	hypothetical prote	neu differentiatio	probable trp-asp r	heregulin precurso	heregulin precurso	heregulin, splice	hypothetical prote
C71610	T34274	A69479	S64023	JQ1979	ASLJBY	E86450	T45053	I38403	T18752	138404	T38666	C43273	A43273	B43273	T39409
N	~	~	N	н	-	N	~	~	~	~	~	~	~	0	7
2013	2018	189	760	1254	80	245	321	350	394	462	576	637	640	645	652
24.0	24.0	23.8	23.8	23.8	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
54	54	53.5	53.5	53.5	23	23	23	23	23	23	53	23	23	23	23
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

```
Callular hepatitis A receptor HAVor-1 precursor - green monkey
NyAlternate names: surface glycoprotein
Cispecies: Cercopithecus aechiops (green monkey, grivet)
Cispecies: Cercopithecus aechiops (green monkey, grivet)
Cispecies: Cercopithecus aechiops (green monkey, grivet)
Cispecies: Cercopithecus aechiops (green monkey, grivet)
Cispecies: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004
Ciscession: S71754
Rikaplan, G.; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M.
EMBO J. 15, 4282-4296, 1996
A;Title: Identification of a surface glycoprotein on African green monkey kidney cells as A;Reference number: S71754
Minolecule type: mRNA
A;Residues: 1-451 «KAP>
A;Cross-references: UNIPROT:095144; EMBL:X98252; NID:g1526573; PID:e247449; PID:g1526574
A;Experimental source: kidney
C;Keywords: glycoprotein
F;1-17/Domain: signal sequence #status predicted <SIG>F;18-451/Product: cellular hepatitis A receptor HAVCr-1 #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 79.1%; Score 178; DB 2; Length 45 Best Local Similarity 81.0%; Pred. No. 1.7e-14; Matches 34; Conservative 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         329 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

Mitochondrial outer membrane protein TOM71 - yeast (Saccharomyces cerevisiae)
N/Alternate names: protein YHR117w
C.Species: Saccharomyces cerevisiae
C.Dacies: Saccharomyces cerevisiae
C.Dacesion: Sacharomyces cerevisiae
C.Dacesion: S48959; S62886
R.Latreille, P.
R.Latreille, P.
R.Latreille, P.
R.Jacession: S48959; S62886
A.Description: The sequence of S. cerevisiae cosmid 8263.
A.Description: The sequence of S. cerevisiae cosmid 8263.
A.Reference number: S46676
A.Accession: S48959
A.Modecule type: DNA
A.Modecule type: DNA
A.Residues: 1-639 <LAT>
A.Residues: 1-639 <LAT>
A.Coss-references: UNIPROT: P38825; EMBL: U00059; NID: G529116; PIDN: AAB68868.1; PID: G5291:
R.Boemer, U. ir Pfanner, N. bietmeier, K.
R.Boemer, U. ir pfanner, N. bietmeier, K.
R.BES Lett. 382, 153-158, 1996
A.Title: Identification of a third yeast mitochondrial Tom protein with tetratrico peptic A.Reference number: S62886; MUID: 96196584; PMID: 8612740

A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Molecule type: DNA A;Residues: 1-639 <BOE> A; Accession: S62886

```
C;Superfamily: human heregulin; EGF homology; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Accession: A27871
                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loc
Matches
                                                                                                            Matches
                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                         A;Genome: nuclear

C;Superfamily: mitochondrial outer membrane protein, 70K; tetratricopeptide repeat homol

C;Superfamily: mitochondrial outer membrane; mitochondrion; transmembrane protein

E;Reywordse: mitochondrial outer membrane; mitochondrion; transmembrane protein

F;86-119/Domain: tetratricopeptide repeat homology <TT02>

F;161-194/Domain: tetratricopeptide repeat homology <TT03>

F;345-377/Domain: tetratricopeptide repeat homology dTT05>

F;348-411/Domain: tetratricopeptide repeat homology dTT05>

F;318-411/Domain: tetratricopeptide repeat homology <TT05>

F;412-445/Domain: tetratricopeptide repeat homology <TT06>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: UNIPROT: Q97206; GB: AE006641; NID: g13814328; PIDN: AAK41392.1; GSPDB: G
C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A Accession: A45769
A.Status: preliminary
A.Status: preliminary
A.Molecule type: mRNA, protein
A.Residues: 1-602 «FAL»
A.Cross-references: UNTRROT:005199; GB:L11264; NID:g212603; PIDN:AAA49037.1; PID:g212604
A.Experimental source: brain
A.Note: sequence extracted from NCBI backbone (NCBIN:127787, NCBIP:127788)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  proteinase related protein [imported] - Sulfolobus solfataricus C; Species: Sulfolobus solfataricus C; Species: Sulfolobus solfataricus C; Species: Sulfolobus solfataricus C; Species: Sulfolobus solfataricus C; Spacession: A90267 R; She, O.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chan Jong, II.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acetylcholine receptor synthesis stimulator ARIA-1 precursor - chicken Cispecies: Gallus gallus (chicken) Cipate: 20-Peb-1995 #sequence_revision 20-Peb-1995 #text_change 09-Jul-2004 Cipate: 20-Peb-1995 #sequence_revision 20-Peb-1995 #text_change 09-Jul-2004 Cipacession: A45769 R.P. Corfas, G.; Lane, W.S.; Fischbach, G.D. Affills, D.L.; Rosen, K.M.; Corfas, G.; Lane, W.S.; Fischbach, G.D. Affille: ARIA, a protein that stimulates acetylcholine receptor synthesis, is a member A; Reference number: A45769; MUID:93201602; PMID:8453670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 SYTTDG--------NDTVTE-SSDGLWNNNQTQLFLEHSLLTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LYSYTTDG----NDTVTESSDGLWNNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                               <TT109>
                                                                                                                                                                                                                                                                                                                                                                                                                <TT08>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Description: Sulfolobus solfataricus complete genome.
A;Reference number: A99139
A;Actession: A90026
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 61.5; DB 2;
Pred. No. 20;
7; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
                                                                                                                                                                                                                                                                                                                                                                                    F;446-479/Domain: tetratricopeptide repeat homology
F;480-513/Domain: tetratricopeptide repeat homology
F;530-65/Domain: tetratricopeptide repeat homology
F;564-597/Domain: tetratricopeptide repeat homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 62.5; Di
Pred. No. 6.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6; Mismatches
                        A;Gene: SGD:TOM71; TOM72
A;Cross-references: SGD:S0001159; MIPS:YHR117w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
                                                                                      A, Map position: 8R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: SSO1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
scructural polyprotein - Venezuelan equine encephalitis virus (subtype II, strain Evergli N;Contains: 6K protein, coat protein; membrane glycoprotein E1; membrane glycoprotein E2; C;Species: Venezuelan equine encephalitis virus C;Species: Venezuelan equine encephalitis virus C;Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 09-Jul-2004 C;Accession: JQ1978 R;Sneider, J.M.; Kinney, R.M.; Tsuchiya, K.R.; Trent, D.W. J. Gen. Virol. 74, 519-523, 1993 A;Fitle: Molecular evidence that epizootic Venezuelan equine encephalitis (VEE) I-AB viru A;Reference number: JQ1978; MUID:93187617; PMID:8445371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         structural polyprotein - Venezuelan equine encephalitis virus (strain TC-83)
N;Contains: 6K peptide; coat protein; membrane glycoprotein E1; membrane glycoprotein E2;
C;Species: Venezuelan equine encephalitis virus
C;Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change 09-Jul-2004
C;Accession: A27871
R;Johnson, B.J.B.; Kinney, R.M.; Kost, C.L.; Trent, D.W.
A;Title: Molecular determinants of alphavirus neurovirulence: nucleotide and deduced prot
A;Reference number: A27871; MUID:86306669; PMID:3755750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Cross-references: UNIPROT: PD5574; GB:X04368; NID:958621; PIDN:CAA27883.1; PID:958622
A; Cross-references: UNIPROT: PD574; GB:X04368; NID:958621; PIDN:CAA27883.1; PID:958622
A; Mote: the authors translated the codon UUC for residues 19 and 27 as 11e and ACC for re
C; Superfamily: togavirus structural polyprotein; transmembrane protein; plycoprotein; plyprotein; transmembrane glycoprotein E2 #status predicted <GP3-
F; 776-718 / Domain: transmembrane #status predicted <TM1-
F; 758-812/Product: membrane #status predicted <TM2-
F; 778-812/Product: membrane #status predicted <TM2-
F; 778-812/Product: membrane #status predicted <TM2-
F; 779-000main: transmembrane #status predicted <TM2-
F; 792-808 / Domain: transmembrane #status predicted <TM2-
F; 792-808 / Domain: transmembrane #status predicted <TM3-
F; 792-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 793-808 / Domain: transmembrane #status predicted <TM3-
F; 794-808 / Domain: transmembrane #status predicted <TM3-
F; 794-808 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Accession: J01978
A,Rocession: J01978
A,Rocession: J01978
A,Rocession: J01978
A,Roseldues: 1-1254 (SNE-
A,Crose-references: UNIPROT: P36330; GB:L04598; NID: 9290612; PIDN: AAA42984.1; PID: 9290614
C,Superfamily: togavirus structural polyprotein; transmembrane protein cykeywords: coat protein; glycoprotein; polyprotein; transmembrane protein fistatus predicted (CTP-
F;1-274/Product: membrane glycoprotein E3 #status predicted «MG3-
F;334-756/Product: membrane glycoprotein E2 #status predicted «MG2-
F;71-21/Domain: transmembrane #status predicted «TM2-
F;75-12/Domain: transmembrane #status predicted (TM2-
F;74-813/Domain: transmembrane #status predicted (TM2-
F;11-1248/Domain: transmembrane #status predicted (TM3-
F;131-1224/Ponduct: membrane glycoprotein E1 #status predicted (MG1-
F;131-1234/Ponduct: membrane glycoprotein E1 #status predicted (TM3-
F;131-1234/Ponduct: membrane glycoprotein E1 #status predicted (TM3-
F;131-1234/Domain: transmembrane #status predicted (AN3-
F;131-1238-1554/Domain: transmembrane #status predicted (AN3-
                                                                                                                                                                                                      7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 59; DB 1; Length 1254;
Pred. No. 40;
3; Mismatches 11; Indels
26.7%; Score 60; DB 2; Length 602; 31.7%; Pred. No. 13; ive 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :| || || || || || || || 3 : | | || 3 : | | || 3 : | || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 : || 3 :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 DTVTESSDGLWNNNQ----TQLFLEHSLLTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26.2%;
ilarity 45.5%;
Conservative
                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
hes 15; Conserv
                                                                                              Best Local Similarity
```

```
structural polyprotein - Venezuelan equine encephalitis virus (strain 3880)
C;Species: Venezuelan equine encephalitis virus
C;Species: Venezuelan equine encephalitis virus
C;Bate: 17-Peb-1994 #sequence_revision 17-Feb-1994 #text_change 09-Jul-2004
C;Accession: D44213
R;Kinney, R.M.; Tsuchiya, K.R.; Sneider, J.M.; Trent, D.W.
Virology 191, 569-580, 1992
A;Tile: Genetic evidence that epizootic Venezuelan equine encephalitis (VEE) viruses may A;Reference number: A44213; MUID:93079889; PMID:1448915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: genomic RNA
A;Residues: 1-1255 KKIN>
A;Cross-references: UNIPROT:P36329; GB:L00930; NID:g323706; PIDN:AAC19325.1; PID:g1375091
C;Superfamily: togavirus structural polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rianonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
ArTitle: Genome sequence of the nematode C. elegans: a platform for investigating biology
A;Reference number: A75000; MUID: 99065413; PMID: 9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_elegans/A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:016956; GB:chr_V; PIDN:AAC69088.1; PID:g2384863; GSPDB:GN000;
A;Note: Similar to lipase; R11G11.14
                                  Fil-175/Product: coat protein #status predicted <CTP.
Fil-175/Product: membrane glycoprotein B2 #status predicted <MG3.
Fil-175/Product: membrane glycoprotein B2 #status predicted <MG2.
Fil-176/Product: membrane glycoprotein B2 #status predicted <MG2.
Fil-1702-722/Domain: transmembrane #status predicted <KP6.
Fil-186-813/Product: 6K protein #status predicted <KP6.
Fil-186-186/Product: membrane #status predicted <MG1.
Fil-185/Product: membrane glycoprotein E1 #status predicted <MG1.
Fil-1832-1249/Domain: transmembrane #status predicted <MM3.
Fil-1832-1849/Domain: transmembrane #status (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein R11G11.14 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May_2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004
           coat protein; glycoprotein; polyprotein; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Keywords: coat protein; glycoprotein; polyprotein; transmembrane protein; 1-275/Product: coat protein #status predicted <CTP>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;276-334/Product: membrane glycoprotein B3 #status predicted <MG3-
P;335-757/Product: membrane glycoprotein B2 #status predicted <MG2-
P;702-722/Domain: transmembrane #status predicted <TM1-
P;758-813/Product: Kf protein #status predicted <KP6-
P;758-814/Domain: transmembrane #status predicted <TM2-
P;141-1255/Product: membrane glycoprotein B1 #status predicted <MG1-
P;1212-1249/Domain: transmembrane #status predicted <TM3-
P;47,286,652,947/Binding site: carbohydrate (Asn) (covalent) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 1255,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 1255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 58; DB:
Fred. No. 54;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                              Score 58;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        158 ETTWESLDHLWNNNQQMFWIQ 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 47.6%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 25.8%;
Best Local Similarity 47.6%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: DNA
A;Residues: 1-405 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: H88930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: H88930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
D44213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             structural polyprotein - Venezuelan equine encephalitis virus (strain TRD)
N;Contains: 6K protein; coat protein; membrane glycoprotein E1; membrane glycoprotein E2
Species: Venezuelan equine encephalitis virus
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004
C;Accession: B31467; A47612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,Accession: B31467
A,Molecule type: mRNA
A,Residues: 1-1254 «KI1>
A,Crose-references: UNIPROT: P09592, GB:J04332, NID:g323708; PIDN:AAB02519.1; PID:g323710
R;Kinney, R.M.; Johnson, B.J.B.; Brown, V.L.; Trent, D.W.
Kyrology, TS2, 400-413, 1986
A;Title: Nucleoride sequence of the 26 S mRNA of the virulent Trinidad donkey strain of
A,Reference number: A47612; MUID:86263392; PMID:3088830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: UNIPROT:P36332; GB:L04653; NID:g290609; PIDN:AAC19319.1; PID:g290611
C;Superfamily: togavirus structural polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: The full-length nucleotide sequences of the virulent Trinidad donkey strain of A;Reference number: A31467; MUID:89243175; PMID:2524126
   # status predicted <TM4>
site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beructural polyprotein - Venezuelan equine encephalitis virus (strain P676)
N;Contains: GK protein; coat protein; membrane glycoprotein E1; membrane glycoprotein IC; Species: Venezuelan equine encephalitis virus
C;Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 09-Jul-2004
C;Accession: B44213
R;Kinney, R.M.; Tsuchiya, K.R.; Sneider, J.M.; Trent, D.W.
A;Title: Genetic evidence that epizootic Venezuelan equine encephalitis (VEE) viruses rA;Reference number: A44213; MUID:93079859; PMID:1448915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          F;47,286,546,652,946/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C)Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004 C;Accession: B31467; A47612 F;Kinney, R.M.; Johnson, B.J.B.; Welch, J.B.; Tsuchiya, K.R.; Trent, D.W. Virology 170, 19-30, 1989 A;Title: The full-length nucleotide sequences of the virulent Trinidad donk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Cross-references GB:L0144-810,'P',812-1254 <KI2>
A;Cross-references GB:L0144-810, P',812-1254 <KI2>
A;Cross-references GB:L0144-810, P',012-1254 <KI2>
C;Superfamily: togavirus structural polyprotein
C;Keywords: coat protein #status predicted <CTP>
F;1-75/Product: coat protein #status predicted <CTP>
F;276-334/Product: membrane glycoprotein E2 #status predicted <MG2>
F;701-718/Domain: transmembrane #status predicted <FM5>
F;774-790/Domain: transmembrane #status predicted <FM3>
F;774-790/Domain: transmembrane #status predicted <FM3>
F;78-813-1254/Product: membrane glycoprotein E1 #status predicted <MG1>
F;1231-1248/Domain: transmembrane #status predicted <FM3>
F;1231-1248/Domain: transmembrane #status predicted <FM4>
                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                              Length 1254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.8%; Score 58; DB 1; Length 1254;
                                                                                                                                                                                         7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7; Indels
                                                                                                                 ä
                                                                                                          Score 58; DB 1
Pred. No. 54;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No
F;1231-1247/Domain: transmembrane #status
F;47,286,546,625,652,946/Binding site: car
                                                                                                                                                                                                                                                                                                       :| || || || :::
758 ETTWESLDHLWNNNQQMFWIQ 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   758 ETTWESLDHLWNNNQOMFWIQ 778
                                                                                                                                                                                                                                                              11 DIVIESSDGLWINNOTOLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 DIVIESSDGLWINNOTOLFLE 31
                                                                                                          Query Match 25.8%;
Best Local Similarity 47.6%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: genomic RNA A; Residues: 1-1255 < KIN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: A47612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: B44213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

us-10-718-321-6_copy_40_81.rpr

--TKG 110

87 NEVVSELNDDSWKNTLSQLFL----

셤

C, Genetica

ð 셤

```
DNA-directed DNA polymerase (EC 2.7.7.7) alpha chain [imported] - Lactococcus lactis subsidiaternate names: DNA polymerase III, alpha chain [c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis c.species: Lactococcus lactis subsp. lactis: S. Anno Lactis: Lactococcus lactis say denome Res. 11, 731-753, 2001
A;Title: The complete genome sequence of the lactic acid bacterium Lactococcus lactis say A;Reference number: A86625; MUID:21235186; PMID:11337471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:P73105; EMBL:D90903; GB:AB001339; NID:g1652127; PIDN:BAA17133 A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
                                                                                                                                              N-acetylmuramoyl-L-alanine amidase (EC 3.5.1.28) 1 - Synechocystis sp. (strain PCC 6803)
N.Alternate names: protein slr1910
C.Species: Synechocystis sp.
A.Variety: PCC 6803
C.Date: 25-Apr-1997 #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 875217
C.Accession: 8752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A.Residues: 1_1558 <.TO>
A.Residues: 1_1558 <.TO>
A.Residues: GB:AE005176; PID:g12725180; PIDN:AAK06222.1; GSPDB:GN00146
A.Experimental source: strain IL1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15

$36519

L2 protein - human papillomavirus type 34

C;Species: human papillomavirus type 34

C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004

C;Accession: $36519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.1%; Score 56.5; DB 2; Length 1658; 40.5%; Pred. No. 1.1e+02; ive 5; Mismatches 12; Indels 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2; Length 338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Accession: 875217
A, Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Superfamily: DNA-directed DNA polymerase III alpha chain polC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340 TDGEDNFTDSLSDALWLRVQGNIEHDKYKDDLVLTAN 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: S74322; MUID: 97061201; PMID: 8905231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 TDGNDTVTES-SDGLW----NNNQTQLFLEHSLLTAN 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84 PLTOY -----VKEARVGRWNNNSTRIVLE 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.1%; Score 56.5; D
41.9%; Pred. No. 18;
ive 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Keywords: nucleotidyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 41.9
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
wes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-338 < KAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C,Genetics:
A,Gene: amiA-1
C,Keywords: hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Gene: polC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: equine rotavirus A
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 16-Jun-2000
C;Accession: A38708
R;Browning, G.F.; Chalmers, R.M.; Fitzgerald, T.A.; Snodgrass, D.R.
J. Gen. Virol. 72, 1059-1064, 1991
A;Title: Serological and genomic characterization of L338, a novel equine group A rotavi
A;Reference number: A38708; MUID:91237340; PMID:1851806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,Title: Genomic sequence comparison of two unrelated isolates of the human gastric path
A,Reference number: A71800, MUID:99120557; PMID:9923682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,Cross-references: UNIPROT:092XS9; GB:AE001515; GB:AE001439; NID:94155425; PIDN:AAD0643
A,Experimental source: strain J99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Variety: strain J99
C; Date: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 09-Jul-2004
C;Date: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 09-Jul-2004
C;Date: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 09-Jul-2004
R;Alm, R-12-1, Ling, Ling, L.S.L.; Moir, D.T.; King, B.L.; Brown, E.D.; Doig, P.C.; Smith, D.R.; Ives, C.; Gibson, R.; Merberg, D.; Mills, S.D.; Jiang, Q.; Taylor, D.E.; Vovis, G.F.; Nature 397, 176-180, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Molecule type: genomic RNA
A,Residues: 1-326 <BRO>
A,Cross-references: GB:D13549; GB:D00843; NID:g222519; PIDN:BAA02748.1; PID:g222520
                                                                                                                                                                                                                                        ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               toxin-like outer membrane protein jhp0856 - Helicobacter pylori (strain J99)
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Superfamily: rotavirus glycoprotein VP7
C;Superfamily: rotavirus glycoprotein; transmembrane protein
C;Keywords: coat protein; glycoprotein; transmembrane protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-326/Product: glycoprotein VP7 #status predicted <GPV>
F;32-48/Region: hydrophobic #status predicted
F;69,238/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                      2 LYSYTTD-----GNDTVTESSDGLW-NNNQTQLFLEHSLLTANT 39
                                                                                                                                                                                                                                                                                                                                                              Indels 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 405;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 SYTTDGNDTVTESSDGLWNNN----QTQLFLEHSLL----TANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ycoprotein VP7 precursor - equine rotavirus A (strain L338)
                                                                                                                                                                                                                                    10;
                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 57; DB 2;
Pred. No. 1.5e+02;
5; Mismatches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 NDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                  Score 57.5; DB Fred. No. 17; 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56.5; DB
Pred. No. 18;
4; Mismatches
A;Gene: R11G11.14
A;Map position: 5
C;Superfamily: triacylglycerol lipase, lingual
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25.1%;
ilarity 39.4%;
Conservative 4
                                                                                                                                                           25.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 25.3%;
Best Local Similarity 36.2%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Species: Helicobacter pylori
                                                                                                                                                      Query Match 25.6
Best Local Similarity 33.3
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Map position: segment 9
C; Superfamily: rotavirus g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: DNA
A;Residues: 1-2399 <ARN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: H71879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: A38708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Experimental sc
C;Genetics:
A;Gene: jhp0856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ð

1;

2

```
R; Delius, H.; Hofmann, B. submitted to the EMBL Data Library, August 1993
submitted to the EMBL Data Library, August 1993
A; Description: Primer-directed sequencing of human papillomavirus types.
A; Reference number: 836469
A; Recession: 836519
A; Molecule type: DNA
A; Residues: 1-472 cDEL>
A; Residues: 1-472 cDEL>
A; Cross-references: UNIPROT: P36758; EMBL: X74476; NID: g396989; PIDN: CAA52559.1; PID: g3969
C; Superfamily: papillomavirus L2 protein
C; Keywords: late protein
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                        Query Match 24.9%; Score 56; DB 2; Length 472; Best Local Similarity 38.5%; Pred. No. 31; Matches 15; Conservative 2; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
```

Search completed: June 29, 2005, 08:58:12 Job time: 4.79568 secs

g

THIS PATE BILINK WEET TO

```
June 29, 2005, 09:46:27; Search time 49.0138 Seconds (without alignments) 635.503 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                        432
1 MPLPRQNHEBVATSPSSPQP.....NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/Der NEW PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

7/cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   487488
5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1717557 segs, 384547976 residues
GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                      US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ••
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                            Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Sequence 1, Appli	Sequence 87, Appl	Sequence 92, Appl	Sequence 88, Appl	Sequence 40317, A	Seguence 258666,	Sequence 93, Appl	Sequence 195346,	Sequence 489, App	Sequence 358602,	Segmence 394. App
SUMMARIES	ΩI	18 17 US-10-718-321-1	US-10-805-177-87	US-10-805-177-92	US-10-805-177-88	US-09-864-761-40317	US-10-424-599-258666	US-10-805-177-93	US-10-425-115-195346	US-10-481-180-489	US-10-425-115-358602	US-09-986-480-394
	DB	17	17	17	11	0	15	11	16	16	16	10
	Query Match Length DB	18	14	12	12	20	45	10	47	40	47	47
de	Query Match	22.9	16.7	15.5	14.6	13.9	13.2	13.0	13.0	12.6	12.6	12.2
	Score	66	72	67	63	9	57	26	26	54.5	54.5	52.5
	Result No.	-	7	٣	4	S	9	7	80	6	10	111

ö

Gaps

ö

Query Match 22.9%; Score 99; DB 17; Length 18; Best Local Similarity 100.0%; Pred. No. 0.0026; Matches 18; Conservative 0; Mismatches 0; Indels

55 SSDGLWNNNQTQLFLEHS 72

ઠે

Sequence 354, App Sequence 394, App Sequence 162113, Sequence 3260, App Sequence 540, App Sequence 540, App Sequence 247663, Sequence 272582, Sequence 212293, Sequence 212293, Sequence 212593, Sequence 223573, Sequence 164, App Sequence 190116, Sequence 192116, Sequence 22346, Sequence 224613, Sequence 2264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 264613, Sequence 106, App Sequence 107, App Sequence 107, App Sequence 174713, Sequence 174713, Sequence 174713, Sequence 208981, Sequence 208981, Sequence 208981, Sequence 208981,	
US-10-425-115-354965 US-10-863-332-394 US-10-863-332-394 US-10-029-386-32839 US-10-029-386-32839 US-10-029-386-328399 US-10-023-282-540 US-10-023-282-540 US-10-425-115-312293 US-10-425-115-312293 US-10-425-115-312293 US-10-425-115-312293 US-10-425-115-22336 US-10-425-115-22336 US-10-425-115-29988 US-10-425-115-29988 US-10-425-115-209983 US-10-425-115-209983 US-10-425-115-352983 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-36986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309986 US-10-425-115-309863 US-10-425-115-309863 US-10-425-115-309863 US-10-425-115-309883	ALIGNMENTS 778321 Al. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10
0 C W C 4 O 4 4 W W O 8 A W W O 8 A W W O 8 A O 9 C C C C C C C C C C C C C C C C C C	/107183: 117A1 117A1 110c. 140e 160pt and 110c.
44414000444444444444444444444444444444	con US/107 55012117A 16c Ma Inc Veronique re, Joseph Rolecules Shedding Rolecules Sheddin
88888000000000000000000000000000000000	SSULT 1 5-10-718-321-1 CENERAL INFORMATION: CENERAL INFORMATION: CENERAL INFORMATION: APPLICANT: Biogen Idec Ma Inc. APPLICANT: Biogen Idec Ma Inc. APPLICANT: Bowentre, Joseph APPLICANT: Bowentre, Joseph APPLICANT: Bowentre, Joseph APPLICANT: The General Hospital C TITLE OF INVENTION: Shedding of F TITLE OF INVENTION: Shedding of F TITLE REFERENCE: A124 US CURRENT APPLICATION NUMBER: US/10/ CURRENT FILING DATE: 2003-11-20 PRIOR PILING DATE: 2001-06-01 PRIOR PILING DATE: 2001-06-01 PRIOR PILING DATE: 2001-06-01 PRIOR PILING DATE: 2001-06-01 PRIOR PILING DATE: 2001-06-04 PRIOR PILING DATE: 2002-05-31 NUMBER OF SEQ ID NOS: 8 SOFTWARE: FastSEQ for Windows Vere SEQ ID NO 1 LENGTH: 18 TYPE: PRI HT ORGANISM: HOMO Sapiens
8000 1400044444 4444 4444 4444 4444 4444	SULT 1 Sequence 1, Applica Publication No. US2 GEMERAL INFORMATION APPLICANT: Biogen APPLICANT: Biogen APPLICANT: Ballly APPLICANT: Ballly APPLICANT: Ballly APPLICANT: Ballly APPLICANT: Ballly APPLICANT: Bonven APPLICANT: The Ge TITLE OF INVENTION TITLE OF INVENTION TITLE OF INVENTION TITLE OF INVENTION THE REPERENCE: AL CURRENT APPLICATION PRIOR PILING DATE: PRIOR PILING DATE: PRIOR APPLICATION PRIOR APPLICATION PRIOR PILING DATE: PRIOR PILING PILING DATE: PRIOR PILING P
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RESULT 1 US-10-718-321- Sequence 1; Publication GENERAL INF APPLICANT: APPLIC

ö

Gaps

ö

SSDGLWNNNQTQLFLEHS 18

셤

```
Indels
                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.6%; Scor.
100.0%; Pred. No. ...
... 0; Mismatches
Pred. No. 3;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 60/236,359
FILING DATE: 2000-09-27
APPLICATION NUMBER: PCT/USO1/00666
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40317, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 88, Application US/10805177 Publication No. US20050084449A1 GENERAL INFORMATION:
Best Local Similarity 100.0%;
Matches 12; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Landes, Gregory M. APPLICANT: Chen, Francine APPLICANT: Bezabeh, Binyam APPLICANT: FOltz, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 14.6
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                     2 PLPRONHEPVAT 13
                                                                                                                                                                                        1 MPLPRQNHEPV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 MPLPRONHEPV 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo Sapiens
US-10-805-177-88
                                                                                                                                                                                                                                                                                                                                                                                                            JS-10-805-177-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                         RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                          ઠે
                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                   Sequence 87, Application US/10805177

| Sequence 87, Application US/10805177
| Publication No. US2050084449A1
| Publication No. US2050084449A1
| GENERAL INFORMATION:
| APPLICANT: Landes, Gregory M. APPLICANT: Chen, Francine APPLICANT: Bezabeh, Binyam APPLICANT: Bezabeh, Binyam APPLICANT: Foltz, Ian Bath, APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Mesri, Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANT: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICANTION: Michael APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNALL INFORMATION:

JAPPLICANT: Landes, Gregory M.

APPLICANT: Chen, Francine

APPLICANT: Beazabeh, Binyam

APPLICANT: Tae, Kam Fai

APPLICANT: Tae, Kam Fai

APPLICANT: Jeffers, Michael

APPLICANT: Jeffers, Michael

APPLICANT: Starling, Gary

APPLICANT: Starling, Gary

APPLICANT: Messe, Peter

APPLICANT: Messe, Peter

APPLICANT: Messe, Peter

APPLICANT: Messe, Peter

TITLE OF INVENTION: DOMAIN AND MUCIN DOMAIN 1 (TIM-1) ANTIGEN AND USES THEREOF

TITLE OF INVENTION: 2004-03-19

FRIDE REFRENCE: ABSCUR.06A

CURRENT FILING DATE: 2003-03-19

PRIOR APPLICATION NUMBER: 60/456,652

PRIOR APPLICATION NUMBER: 60/456,652

PRIOR SEQ. ID NOS: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 92: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

SEQ. ID NO 93: 141

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16.7%; Score 72; DB 17; Length 14; 100.0%; Pred. No. 1.1; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.5%; Score 67; DB 17; Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 92, Application US/10805177; Publication No. US20050084449A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MPLPRONHEPVAT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 16.7
Best Local Similarity 100.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
US-10-805-177-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-805-177-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-805-177-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Sharron G.
APPLICANT: Hanzel, David K.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION GENE EXPRESSION ANALYSIS BY MICROARRAY
TITLE OF INVENTION NUMBER: US 60/180,312
PRIOR PELLING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
APPLICANT: Tee, Kam Fai,
APPLICANT: Jeffers, Michael
APPLICANT: Jeffers, Michael
APPLICANT: Gefers, Michael
APPLICANT: Geri, Medi
APPLICANT: Graning, Gary
APPLICANT: Mezes, Peter
APPLICANT: Kiramisov, Nikolia
TITLE OF INVENTION: DOMAIN AND MUCIN DOMAIN 1 (TIM-1) ANTIGEN AND USES THEREOF
TITLE OF INVENTION: JOHANN NUMBER: US/10/805,177
TITLE OF LING DATE: 2004-03-19
CURRENT APPLICANTON NUMBER: US/0456,652
PRIOR APPLICATION NUMBER: US/0456,652
PRIOR FILING DATE: 2003-03-19
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 17; Length 12; 7.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
```

```
APPLICANT: La Rosa, Thomas J.
APPLICANT: La Rosa, Thomas J.
APPLICANT: Exeratic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Plants
FILE OF INVENTION: Plants
FILE REFERENCE: 38-21(53222)B
CURRENT APPLICATION NUMBER: US/10/425,115
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 369326
SEQ ID NO 195346
LENGTH: 47
                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.0%; Score 56; DB 17; Length 10;
                                                                                                                             12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Clone ID: MRT4577_109744C.1.pep
US-10-425-115-195346
                                                              Score 57; DB 15;
Pred. No. 1.5e+02;
                                                                                                                             3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                          18 PVATIVAFPQPPNVQMTTLQPSNHKIPT 45
                                                                                                                                                                                            10 PVATSPSSPQPAETHPTTLQGAIRREPT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 195346, Application US/10425115
Publication No. US20040214272A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 93, Application US/10805177 Publication No. US20050084449A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.08;
                                                              Query Match
Best Local Similarity 46.4%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Landes, Gregory M. APPLICANT: Chen, Francine APPLICANT: Bezabeh, Binyam APPLICANT: Foltz, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PRONHEPVAT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 PRONHEPVAT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-805-177-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
US-10-425-115-195346
   US-10-424-599-258666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Other Molecules Associated With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 258666, Application US/10424599
; Sequence 258666, Application US/10424599
; Publication No. U320040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Cao Yongwei
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Ass
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE OF INVENTION NUMBER: US/10/424,599
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT PILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 228666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: MAP TO AL162458.1

OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 2.7

OTHER INFORMATION: EXPRESSED IN HERAT, SIGNAL = 1.8

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.4

OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.9

OTHER INFORMATION: EXPRESSED IN PRACENTA, SIGNAL = 1.6

OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 6.1

OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 6.1

OTHER INFORMATION: BXPRESSED IN LUNG, SIGNAL = 2

SOTHER INFORMATION: BXTHUMAN HIT: BEB31812.1, EVALUE 8.80e-02

US-09-864-761-40317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.9%; Score 60; DB 9; Length 50;
44.4%; Pred. No. 85;
tive 3; Mismatches 9; Indels
                   PRIOR FILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00664
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PPLICATION NUMBER: PCT/USO1/00663
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2000-06-31
PRIOR PILING DATE: 2000-06-31
PRIOR PILING DATE: 2000-06-31
PRIOR PILING DATE: 2000-06-31
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Clone ID: PAT_MRT3847_755C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 ATSPSS-----PQPAETHPTTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 ATSPSSSRAAPTLPAPPTVAPTACPGAVPR-PTTTP 39
APPLICATION NUMBER: PCT/US01/00667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 44.4
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Glycine max
```

g

```
셤
                                                                                                                                                                         d
                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 388602.

Sequence 388602.

Bullcation No. US20040214272A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: AVAlic, David K.

APPLICANT: APPLICANT: About Xinua

APPLICANT: APPLICANT: About Xinua

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants

TITLE OF INVENTION: UNMBER: US/10/425,115

CURRENT APPLICATION NUMBER: 2003-04-28

NUMBER OF SEQ ID NOS: 369326

SEQ ID NO 388602

LENGTH: 47

TENGTH: 47
                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS

APPLICANT: HUMAN SERVICES

APPLICANT: Valenzuela, Jesus G.

APPLICANT: Valenzuela, Jesus G.

APPLICANT: Ramhawi, Shaden

APPLICANT: Ramhawi, Shaden

APPLICANT: Ramhawi, Shaden

APPLICANT: Rabeiro, Jose M. C.

TITLE OF INVENTION: ANTI-ARTHROPOD VECTOR VACCINES, METHODS

TITLE OF INVENTION: OF SELECTING AND USES THEREOF

FILE REFERENCE: 4239-67347

CURRENT APPLICATION NUMBER: US/10/481,180

PRIOR FILING DATE: 2002-16-18

PRIOR FILING DATE: 2001-66-18

PRIOR FILING DATE: 2001-66-18

PRIOR FILING DATE: 2001-06-19

NUMBER OF SEQ ID NOS: 884

SEQ ID NO 489

SEQ ID NO 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ï
                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                         Gaps
                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) OTHER INFORMATION: Description of Artificial Sequence; NOTE ; OTHER INFORMATION: Synthetic Construct US-10-481-180-489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 54.5; DB 16; Length 40;
Pred. No. 2.4e+02;
5; Mismatches 16; Indels
Score 56; DB 16; Length 47;
Pred. No. 2e+02;
3; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_90212C.1.pep
US-10-425-115-358602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 SSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDT 51
                                                                                                                                                  14 PNATSPRSTMPSRCRPSTSLWAGAVHTEP 42
                                                                                                        10 PVATSPSSPQPAETHPTT--LOGAIRREP 36
                                                                                                                                                                                                                                                                  ; Sequence 489, Application US/10481180; Publication No. US20040171821A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 38.9%;
Matches 14; Conservative
       Query Match
Best Local Similarity 44.8%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                   US-10-481-180-489
                                                                                                        ઠે
                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
```

```
US-10-425-115-354965

Sequence 354965, Application US/10425115

Publication No. US20040214272A1

APPLICANT: La Rosa, Thomas J.

APPLICANT: APPLICANT: Availe, David K.

APPLICANT: APPLICANT: Availe, David K.

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants

TITLE OF INVENTION: Plants

TITLE OF INVENTION: NUMBER: US/10/425,115

CURRENT APPLICATION NUMBER: US/10/425,115

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 369326

SEQ ID NO 354965
                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
FEATURE:
NAME/CON: (32)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-986-480-394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                                                    7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 47;
       Length 47;
                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12.2%; Score 52.5; DB 16; 42.6%; Pred. No. 4.6e+02;
Score 54.5; DB 16;
Pred. No. 2.9e+02;
1; Mismatches 11;
                                                                                                                                                                                                                                                            Sequence 394, Application US/09986480

Publication No. US2003002799941

GENERAL INFORMATION:
APPLICANT: ROSEN et al.
TILE OF INVENTION: 143 Human Secreted Proteins
FILE REFERENCE: PS500P1

CURRENT EPLICATION NUMBER: US/09/986,480

CURRENT FILING DATE: 2001-11-08

PRIOR FILING DATE: 2000-05-11

PRIOR PLICATION NUMBER: US 60/134,068

PRIOR PLICATION NUMBER: US 60/134,068

PRIOR FILING DATE: 1999-05-13

NUMBER OF SEQ ID NOS: 456

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
12.2%; Score 52.5; DB 10;
Best Local Similarity 35.3%; Pred. No. 4.6e+02;
Matches 12; Conservative 2; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Clone ID: MRT4577_86899C.1.pep
US-10-425-115-354965
                                                                                                       25 PTTLQ----GAIRREPT---SSPLYSYTTDGNDT 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 NHEPVATSPSSPQPAETHPTTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 NANPVSTLPLGPSPTPSHTA-----HPPTPSP 28
                                                                                                                                                  1 POTLINHGAAGPIRRSPAPNPPAPLYGYRNSGWDT 34
     Query Match 12.6%;
Best Local Similarity 44.1%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: SITE
LOCATION: (37)
                                                                                                                                                                                                                           RESULT 11
US-09-986-480-394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
```

ï

27; Indels

Mismatches

```
APPLICANT: Khramtsov, Nikolia
TITLE OF INVENTION: ANTIBODIES AGAINST T CELL IMMUNOGLOBULIN
TITLE OF INVENTION: DOMAIN AND MUCIN DOMAIN 1 (TIM-1) ANTIGEN AND USES THEREOF
FILE REFERENCE: ABXCUR.006A
                                                                               5 RONHEDVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/805,177;
CURRENT FILING DATE: 2004-03-19;
PRIOR PLLING DATE: 2003-19;
NUMBER OF SEQ ID NOS: 141;
SOFTWARE: PastSEQ.for Windows Version 4.0;
SEQ ID NO 89;
IXENCTH: 10;
TYPE: PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: June 29, 2005, 10:14:18
Job time : 49.0138 secs
                                                                                                                                                                                                            Sequence 89, Application US/10805177 Publication No. US20050084449A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%;
Matches 9; Conservative 0
                                                                                                                                                                                                                                                                                                                                      Bezabeh, Binyam
FOLIZ, Ian
Tee, Kam Fai
Jeffers, Michael
Mesri, Mehdi
Starling, Gary
Mezes, Peter
                                                                                                                                                                                                                                                                                         APPLICANT: Landes, Gregory M. APPLICANT: Chen, Francine
    17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 MPLPRONHE 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MPLPRQNHE 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-805-177-89
    Matches
                                                 ઠ
                                                                                            윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 162113, Application US/10424599

Publication No. US20040031072A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: La Kovalac Thomas J
APPLICANT: APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: SOy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 162113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: (37)
CTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-10-863-332-394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (32)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
    Gaps
  7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 12.2%; Score 52.5; DB 17; Length 47; Best Local Similarity 35.3%; Pred. No. 4.6e+02; Matches 12; Conservative 2; Mismatches 13; Indels '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 52.5; DB 15; Length 48; Pred. No. 4.8e+02;
                                                                          13 ISPSSPOPAE--THPTTLQGAIRREPISSPL---YSYTTDGNDTVT 53
  16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Clone ID: PAT_MRT3847_117405C.1.pep
US-10-424-599-162113
                                                                                                                                                                                                                                                                          TILLE OF INVENTION: 143 Human Secreted Proteins
FILLE REFERENCE: PS500P1
CURRENT APPLICATION NUMBER: US/10/863,332
CURRENT PILING DATE: 2004-06-09
PRIOR PILING DATE: 2004-06-09
PRIOR PLILING DATE: 2001-11-08
PRIOR PLILING DATE: 2000-05-11
PRIOR PLILING DATE: 2000-05-11
PRIOR PLILING DATE: 2000-05-11
PRIOR PLILING DATE: 2000-05-13
PRIOR FILING DATE: 1999-05-13
NUMBER OF SEQ ID NOS: 456
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 NHEPVATSPSSPQPAETHPTTLQGAIRREPTSSP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 NMNPVSTLPLGPSPTPSHTA-----HPPTPSP 28
  4; Mismatches
                                                                                                                                                                                                            Sequence 394, Application US/10863332
Publication No. US20050064458A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12.2%;
31.5%;
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-424-599-162113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
Matches
                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
```

ö

Gaps

.;

Indels

Score 52; DB 17; Pred. No. 83; 0; Mismatches 0

THIS PACE BILINE USE IN

Н

us-10-718-321-6.rai

```
June 29, 2005, 08:57:16; Search time 11.1395 Seconds (without alignments) 542.805 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 64
                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                         432
1 MPLPRQNHBPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                            Issued Patents AA:*

. (cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-197-970B-7
US-08-287-001A-2
US-09-197-970B-3
US-09-197-970B-3
US-09-854-856-64
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-16
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
US-09-854-856-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-09-854-856-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               854-856-24
                                                                                                                                                                  513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                      - protein search, using sw model
                                                                                                                                     BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                               Length DB
                                                                                                US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297
1911
1939
1939
2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .......
                                                                                                Title:
Perfect score:
                                                                                                                                      Scoring table:
                                      OM protein
                                                                                                                                                                                                                                                                              Database :
                                                                                                                    Sequence:
                                                                                                                                                                  Searched:
                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                      Result
No.
```

```
Sequence 44343, A
Sequence 4, Appli
Sequence 2, Appli
Sequence 46213, A
                  46395, A
17562, A
2059, B
6, Appli
5, Appli
5, Appli
5, Appli
5, Appli
2, Appli
7, Appli
7, Appli
            Sequence
                                           Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                            Sequence
Sequence
Sequence
Sequence
Sequence
                                 Sequence
                                                                                                                                                                                                                                                                          Sequence 7, Application US/09197970B

Patent No. 6664385

GENERAL INFORMATION:
GENERAL INFORMATION:
JOSEPH V. Bonventre
Catherine A. Hession
Takaharu Ichimura
Henry Wei
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
CORTWARE: Facentin Release #1.0, Version #1.30
CURSNT APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: «Unknown»
PRIOR APPLICATION AURIER: US 60/018,228
FILING DATE: 24-MAY-1996
ATTOREY/AGET INFORMATION:
NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: 35,245
REFERENCE/DOCKET NUMBER: 36,245
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
                             US-09-248-796A-17562
US-09-248-796A-17562
US-09-248-796A-20593
US-09-514-245-6
US-08-168-091A-2
US-08-428-926-5
US-08-428-927-5
US-08-428-927-5
US-08-428-927-5
US-08-299-517-5
US-08-270-6508-7
US-08-697-954-2
US-09-270-6508-7
US-09-270-6508-7
US-09-270-6508-7
US-08-760-615-4
            -09-854-856-2
-09-270-767-46395
                                                                                                                                                                             US-09-336-910A-2
US-09-270-767-46213
                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617) 679-2838
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
 2354
2382
109
109
109
602
602
602
602
602
1104
602
1166
611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
 US-09-197-970B-7
69
69
69
69
69
69
69
69
69
                                                                                                                                                        68.5
68.5
68.5
67.5
```

Score 432; DB 4; Length 334; Pred. No. 2e-41;

100.0%;

Query Match Best Local Similarity

MOLECULE TYPE: protein SEQ ID NO: 7: US-09-197-9708-7

LENGTH: 334 amino acids TYPE: amino acid

TOPOLOGY: linear

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291 PLPMQNHEPVATSPSSPQPAETHPVTLLGATRTQPTSSPLYSYTTDGSDTVTESSDGLWN 350
                                                                 210 MPLPRQNHEDVATSPSSPQPAETHPTTLQGAIRREPISSPLYSYTTDGNDTVTESSDGLW 269
                                           1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 PLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                           RESULT 2
US-08-287-001A-2
; Sequence 2. Application US/08287001A
; Patent No. 5622861
; GENERAL INFORMATION:
; APPLICANT: KAPLAN, GERARDO
; APPLICANT: FINSTONE, STEPHEN M.
; TITLE OF INVENTION: OF USE
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NEEDLE & ROSENBERG, P.C.
; STREET: Suite 1200, The Candler Bldg, 127 Peachtree
; STREET: Street
    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEPATITIS A VIRUS RECEPTOR AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 80.6%; Score 348; DB 1; Length 451; Best Local Similarity 82.5%; Pred. No. 1.2e-31; Matches 66; Conservative 3; Mismatches 11; Indels
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/287,001A
  Mismatches
                                                                                                                                                   270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PILING DATE:

ATIONE DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Spratt, Gwedolyn D.
REGISTRATION NUMBER: 36,016
REFERENCE/DOCKET NUMBER: 1414.
TELEPHONICATION INFORMATION:
TELEPHONICATION INFORMATION:
TELEFAX: 404/688-9880
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 451 amino acids
TYPE: amino acid
TYPE: ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
PCT-US95-09941-2
SQUENCE 2, Application PC/TUS9509941
SGNERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: HEPATITIS A V
TITLE OF INVENTION: OF USE
                                                                                                                             61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        351 NNÓTÓLSPEHSPOMVNÍTEG 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 NNOTOLFLEHSLLTANTTKG 81
    .
0
  81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Atlanta
STATE: Georgia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-287-001A-2
  Matches
                                                                                 셤
                                                                                                                             ð
                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
2 PLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Richad L. Cate
Richad L. Cate
NIMBER OF INSTITUTION: MODULATORS OF TISSUB REGENERATION
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSES BLOGEN, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
             ADDRESSEE: NEEDLE & ROSENBERG, P.C.
STREET: Suite 1200, The Candler Bldg, 127 Peachtree STREET: Street
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
                                                                                                                                           ZIP: 30303
ZIP: 30303
MORDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/09941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; DB 5;
1.2e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80.6%; Score 348; DB
82.5%; Pred. No. 1.2e
:ive 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09197970B Patent No. 6664385 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/287,001
FILING DATE: 5 AUG 1994
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               351 NNOTOLSPEHSPOMVNTTEG 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Spratt, Gwedolyn D.
REGISTRATION NUMBER: 36,016
REFERENCE/DOCKET NUMBER: 141
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 404/688-9880
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : 451 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 404/688-0770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: protein
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US95-09941-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-197-970B-3
```

```
GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-854-856-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 8
US-09-854-856-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | : | : | |
-----AEVTETPSYT-PADWNG 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 RONHEPVAT--SPSSPQPAET------HPTTLQGAIRREPTSSPLYSYTTDGND 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 LPLSSRGHQPGRLCTAPSAP---SQHPRLGQSVSLNPPVRKP--SPAQDGWSSESSDSEG 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MPLPRONHEP -- VATSPSSPQPAETHPTTLQCAIRREPTSSPLYSYTTDGNDTVTESSDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2; Length 297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 20.6%; Score 89; DB 4; Length 307; Best Local Similarity 34.1%; Pred. No. 0.036; Matches 31; Conservative 9; Mismatches 27; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4 Application US/09006535

Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequence 1. Sequen
                                                         PRILING DATE: 23-NO. 6664385-1998
FILING DATE: 23-NO. 6664385-1998
FLIASSIFICATION: «UNKNOWN»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-MAY-1996
ATTORNEY/AGENT INFORMATION:
NAME: Levine, Leslie M.
REFERENCE/DOCKET NUMBER: A010 PCT CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 208 TVT-SSEEAWNNHTVRIPLRKP--QRNPTKG 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51 TVTESSDGLWNNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
16.6*; Score 71.5; Di
Best Local Similarity 30.6*; Pred. No. 3.5;
Matches 19; Conservative 9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-197-970B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (617) 679-2810
TELEFAX: (617) 679-2838
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 64, Application US/09854856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 307 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29 LW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76 SW 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
US-09-854-856-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-006-535-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-006-535-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
```

```
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Walke, D. Wade
APPLICANT: Hilbun, Erin
APPLICANT: Hilbun, Erin
APPLICANT: Hilbun, Gregory
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides
TITLE OF INVENTION: Brocding the Same
TITLE OF INVENTION: Brocding the Same
FILE REFERENCE: LEX-0178-USA;
CURRENT PILING DATE: 2001-05-14
PRIOR FILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 64
SOFTWARE: FastSEQ for Windows Version 4.0
: SEQ ID NO 48
LENGTH: 1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                APPLICANT: Introd, Gregory
APPLICANT: Turner, C. Alexander Jr.
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVERTION: No. 65412221 Human Kinases and Polynucleotides
TITLE OF INVERTION: Encoding the Same
FILE REFERENCE: LEX-0178-USA
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT FILING DATE: 2001-05-14
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 64
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 64
LENGTH: 1911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             743 EPVAVA----QPQATQPTTLASSV--DSAHSDVASGMSDGNENVPSSS 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match · 16.4%; Score 71; DB 4; Length 1911; Best Local Similarity 39.6%; Pred. No. 46; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 16.4%; Score 71; DB 4; Length 1939; Best Local Similarity 39.6%; Pred. No. 47; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (1)...(1911)
CTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: VARIANT
! LOCATION: (1)...(1939)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 48, Application US/09854856
Patent No. 6541252
Hilbun, Erin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapiens
```

```
Best Local Similarity 39.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-854-856-42
US-09-854-856-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                     general information of properties of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents of patents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 16, Application US/09854856

Patent No. 6541252

GENERAL INFORMATION:

APPLICANT: Walke, D. Wade

APPLICANT: Walke, D. Wade

APPLICANT: Hilbun, Erin

APPLICANT: Donoho, Gregory

APPLICANT: True OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: Encoding the Same

TITLE OF INVENTION: Encoding the Same

FILE REFERENCE: LEX-0178-USA

CURRENT PILING DATE: 2001-05-14

PRIOR PILING DATE: 2001-05-14

PRIOR PILING DATE: 2000-05-19

NUMBER OF SEQ ID NOS: 64

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NOS: 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 16.4%; Score 71; DB 4; Length 1971; Best Local Similarity 39.6%; Pred. No. 48; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
16.4%; Score 71; DB 4; Length 1999;
Best Local Similarity 39.6%; Pred. No. 49;
Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (1)...(1971)
OTHER INFORMATION: Xaa = Any Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION: (1)...(1999)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-16
Application US/09854856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 1971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
US-09-854-856-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-854-856-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
```

RESULT 10

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7
Sequence 58, Application US/09854856
Fatent No. 6541252
GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
APPLICANT: Hibun, Brin
APPLICANT: Hibun, Gragory
APPLICANT: Turner, C. Alexander Jr.
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. 6541252e1 Human Kinases and Polynucleotides
TITLE OF INVENTION: Encoding the Same
FILE REFERENCE: LEX-0179-USA
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT FILING DATE: 2001-05-14
FRIOR APPLICATION NUMBER: US 60/206,015
FRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 64
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
APPLICANT: Walke, D. Wade
APPLICANT: Walke, D. Wade
APPLICANT: Hilbun, Erin
APPLICANT: Albun, Erin
APPLICANT: Turner, C. Alexander Jr.
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: D. Encoding the Same
FILE REFRENCE: LEX-0178-USA
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT FILING DATE: 2001-05-14
PRIOR FILING DATE: 2000-05-19
FILE REFERENCE: LEX-0178-USA
CURRENT FILING DATE: 2000-05-19
FILE REFERENCE: LEX-0178-USA
CURRENT FILING DATE: 2000-05-19
FILE REFERENCE: LEX-0178-USA
TYPE: FALSEQ for Windows Version 4.0
SOFTWARE: FastSEQ for Windows Version 4.0
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE FILE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SOFTWARE: PRINCE CONTROL OF SEQ ID NOS: 64
SO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 16.4%; Score 71; DB 4; Length 2004; Best Local Similarity 39.6%; Pred. No. 49; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16.4%; Score 71; DB 4; Length 2032; 39.6%; Pred. No. 50; tive 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 EPVATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: VARIANT
LOCATION: (1)...(2004)
OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COTATION: (1)...(2032)
CTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 42, Application US/09854856
Patent No. 6541252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
Sequence 46, Application US/09854856;
Sequence 46, Application US/09854856;
Patent No. 6541252
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: Donoblo, Gregory
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGORY
APPLICANT: TURNER OF GREGOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               743 EPVAVA----QPQATQPTTLASSV--DSAHSDVASGMSDGNENVPSSS 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 71; DB 4; Length 2076;
Pred. No. 51;
7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         i LOCATION: (1)...(2076)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: (1)...(2092)
CTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-854-856-10
; Sequence 10, Application US/09854856
; Setter No. 6541252
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 39.6%;
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: VARIANT
RESULT 14
US-09-854-856-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 26, Application US/09854856

Sequence 26, Application US/09854856

Patent No. 6541252

GENERAL INFORMATION:

APPLICANT: Walke, D. Wade

APPLICANT: Hilbun, Erin

APPLICANT: True OF INVENTION: C. Alexander Jr.

APPLICANT: True OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides

TITLE OF INVENTION: No. 65413-654

CURRENT APPLICATION NUMBER: 2001-05-14

PRIOR APPLICATION NUMBER: US 60/206,015

PRIOR APPLICATION NUMBER: US 60/206,015

PRIOR ELING DATE: 2000-05-19

SOFTWARE: PastSEQ for Windows Version 4.0

SEQ ID NO 26

LENGTH: 2064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                    APPLICANT: Hilbun, Erin
APPLICANT: Donoho, Gregory
APPLICANT: Donoho, Gregory
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides
TITLE OF INVENTION: Encoding the Same
FILE REPERBNCE: LEX-0178-USA
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT PILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: US 60/206,015
PRIOR FILING DATE: 2000-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 16.4%; Score 71; DB 4; Length 2048; Best Local Similarity 39.6%; Pred. No. 50; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 16.4%; Score 71; DB 4; Length 2064; Best Local Similarity 39.6%; Pred. No. 51; Matches 19; Conservative 7; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9 EPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 EPVATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 64
SOFTYARRE: FastSEQ for Windows Version 4.0
SEQ ID NO 62
LENGTH: 2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION: (1)...(2048)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: (1) ... (2064)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-26
                                ; Sequence 62, Application US/09854856; Patent No. 6541252.
GENERAL INFORMATION:
APPLICANT: Walke, D. Wade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
US-09-854-856-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

ä

Gaps

. 9

```
7
APPLICANT: Walke, D. Wade
APPLICANT: Hilbun, Erin
APPLICANT: Hilbun, Erin
APPLICANT: Hilbun, Gregory
TOTILE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides
TITLE OF INVENTION: No. 6541252el Human Kinases and Polynucleotides
TITLE OF INVENTION: Encoding the Same
TITLE OF INVENTION: Encoding the Same
FILE REFERENCE: LEx-0178-USA;
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT FILING DATE: 2001-05-14
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 64
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 2092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          896 EPVAVA----QPQATQPTTLASSV--DSAHSDVASGMSDGNENVPSSS 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 16.4%; Score 71; DB 4; Length 2092; Best Local Similarity 39.6%; Pred. No. 52; Matches 19; Conservative 7; Mismatches 16; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 EPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

Sequence 284397, Sequence 166786, Sequence 195017, Sequence 151333, Sequence 1031, Ap

Sequence 152970,

Sequence 318121, Sequence 216152, Sequence 267756, Sequence 277738, Sequence 277738, Sequence 277239, Sequence 26943, Sequence 117, App Sequence 117, App Sequence 554, App Sequence 554, App Sequence 554, App Sequence 554, App Sequence 123, App

```
Sequence 1, Application US/10718321
Sequence 1, Application US/10718321
Publication No. US20050112117A1
GENERAL INFORMATION:
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Molecules and Methods for Inhibiting
CURRENT FILIAG DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 05/295449
PRIOR APPLICATION NUMBER: 60/295907
PRIOR APPLICATION NUMBER: 60/295907
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILING DATE: 2000-06-04
SPRIOR FILIN
36.0%; Score 99; DB 17;
100.0%; Pred. No. 4.1e-06
tive 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
nes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                          US-10-718-321-1
                                                                                                                42.5
42.5
5
                                                                                                                                                                                                                                                                   41.5
                                                                                                                                                                                                                                                                                     41.5
41.5
5.14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Si
Matches 18
       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22, Appl
22, Appl
240616,
179504,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282496, 264613,
                                                                                                                             June 29, 2005, 09:46:27; Search time 31.4656 Seconds (without alignments) 635.503 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  399,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                        US-10-718-321-7_COPY_249_300
275
1 PLYSYTTDGNDTVTESSDGL......SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US11B_PUBCOMB.ppp:*
                                                                                                                                                                                                                                                                                                                                                                                   487488
                 GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-718-321-1
US-10-425-115-199618
US-10-424-599-190016
US-10-424-599-264613
US-10-424-599-264613
US-10-318-675-22
US-10-318-675-22
US-10-424-599-179504
US-09-983-802-399
US-09-984-490-399
                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                          1717557 segs, 384547976 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Applications_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                - protein search, using sw model
                                                                                                                                                                                                                                                                                     BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110
115
115
115
110
110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
Match Length
                                       Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published_
                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0 Maximum DB seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16.4
                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                              OM protein
                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
6
7
110
110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Result
No.
```

ALIGNMENTS

ö

Gaps

ö

Length 18; Indels

4.1e-06; hes 0;

Gaps

9

```
APPLICANT: La Rosa Thomas J
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFREENTS: 38-21(53233)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
EROGENERAL 40
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE CAO YONGWei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENTS: 38-21(53233)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 282496
LENGTH: 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Applied NanoSystems B.V.
TITLE OF INVENTION: A method to provide bacterial ghosts with antigens FILE REPERENCE: 2183-554708
CURRENT APPLICATION NUMBER: US/10/321,857
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/NLO2/00383
PRIOR APPLICATION NUMBER: 020213-18
PRIOR PRILING DATE: 2002-06-11
PRIOR PRILING DATE: 2001-06-11
NUMBER OF SEQ ID NOS: 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                  Length 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10; Indels
                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Clone ID: PAT_MRT3847_97115C.1.pep
US-10-424-599-282496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Clone ID: PAT_MRT3847_80967C.1.pep
US-10-424-599-264613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15;
                                                                                                                                                                                                                                                                                                                                                                                                      15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 47.5; DB Pred. No. 84; 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                  Score 48; DB 1
Pred. No. 91;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11 DTVTESSDGLWNNNQTQLFLEHSLLTANTT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 LWNNNQTQLFLEHSLLTA-----NTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 264613, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-321-857-22
Sequence 22, Application US/10321857
Publication No. US20030180816A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    17.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 40.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                               Query Match 17.5
Best Local Similarity 39.3
Matches 11, Conservative
                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-424-599-264613
                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: La Rosa Thomas J
APPLICANT: Exosa Thomas J
APPLICANT: About Vibra
APPLICANT: About Vibra
APPLICANT: About Vibra
APPLICANT: About Vibra
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENCE: 38-21(53223)B
CURRENT APPLICANTON NUMBER: US/10/424,599
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 190016
LENGTH: 44
                                                                                                                                                                                APPLICANT: La Rosa, Thomas J.
APPLICANT: La Rosa, Thomas J.
APPLICANT: La Rovalic, David K.
APPLICANT: Chou, Yihua
APPLICANT: Cahou, Yihua
APPLICANT: Cahou, Yihua
APPLICANT: Cahou, Yongwei
TITLE OF INVENTION: Plants
FILE OF INVENTION: Plants
FILE REFERENCE: 38-21 (5322) B
CURRENT FILING DATE: 2003-04-28
KUMBER OF SEQ ID NOS: 369326
SEQ ID NO 199618
LENGTH: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15; Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Clone ID: PAT_MRT3847_142603C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Clone ID: MRT457_113624C.1.pep
US-10-425-115-199618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 48; DB 1; Pred. No. 68; 8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17.5%; Score 48; DB 37.9%; Pred. No. 81; tive 7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||:|| | :: :: || :: :: |
NNKTQKFSNSSVIIVSSNHGITINLSIALL 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23 NNOTOLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12 TVTESSDGLWNNN----QTQLFLEHSLLT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 TPTQSSLNFYHSNTSLSETSFFIKHSLTT 30
                                                                                                                        Sequence 199618, Application US/10425115
Publication No. US20040214272A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 190016, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 282496, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
              SSDGLWNNNQTQLFLEHS 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: La Rosa Thomas J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Zea mays
                                                                                                       US-10-425-115-199618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-424-599-190016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-424-599-190016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-424-599-282496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

Gaps

.. ..

Gaps

```
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENCE: 38-21(5223) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT PILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 179504
LENGTH: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JUSTOS - 993 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902 - 902
                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                                                                                      Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 49;
                                                                                                                                                                              Query Match 16.7%; Score 46; DB 15; Length 44 Best Local Similarity 36.8%; Pred. No. 1.5e+02; Matches 14; Conservative 5; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDNAKSSADSYINDRSVDYLIDYEHNLVSSNTFKNYTRHGCDKV 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 NDTVTESSDGLWNNNQTQLFL--EHSLLTANTTKGIYAGVCISV 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , OTHER INFORMATION: Clone ID: PAT_MRT3847_133108C.1.pep
US-10-424-599-179504
                                     FEATURE:
CTHER INFORMATION: Clone ID: PAT_MRT3847_59303C.1.pep US-10-424-599-240616
                                                                                                                                                                                                                                                                                                                                                                            11 PLFIY-----YKSSES-WNSNKTNLF-SHDAHTFN 38
                                                                                                                                                                                                                                                                                                                                  1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTAN 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 16.7%; Score 46; DB 15; Best Local Similarity 27.3%; Pred. No. 1.7e+02; Matches 12; Conservative 8; Mismatches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-424-599-179504
; Sequence 179504
; Publication US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Glycine max
FEATURE:
   ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-983-802-399
                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 240616, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Cano Vihua
APPLICANT: Cano Vihua
APPLICANT: Cano Vihua
APPLICANT: Cano Vongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE REPERENCE: 38-21(53223)
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 240616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22, Application US/10318675
; Sequence 22, Application US/10318675
; Publication No. US20030186851A1
; GENERAL INFORMATION:
   APPLICANT: Applied NanoSystems B.V.
   TITLE OF INVENTION: Bacterial ghosts provided with antigens
; TITLE OF INVENTION: Bacterial ghosts provided with antigens
; TITLE OF INVENTION: Bacterial ghosts provided with antigens
; CURRENT APPLICATION NUMBER: US/10/318,675
; CURRENT FILING DATE: 2002-10-13
; PRIOR PELING DATE: 2002-06-11
; PRIOR PILING DATE: 2001-06-11
; PRIOR FILING DATE: 2001-06-11
; NUMBER OF SEQ ID NOS: 165
; SOFTWARE: Patentin Ver. 2.1
; FEWING NO. 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YVVKQGDTLSGIASN-WGTNWQELARQNSLSNPNM---IYAGQVIS 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 YTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCIS 50
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 17.1%; Score 47; DB 14; Length 44; Best Local Similarity 32.6%; Pred. No. 1.18+02; Matches 15; Conservative 6; Mismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S YTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCIS 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 17.1%; Score 47; DB 14; Length 44; Best Local Similarity 32.6%; Pred. No. 1.18+02; Matches 15; Conservative 6; Mismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 YVVKQGDTLSGIASN-WGTNWQELARQNSLSNPNM---IYAGQVIS 42
                                                                                                                                                                                                                                                   . LOCATION: (1)...(44)
. OTHER INFORMATION: AcmA cell wall binding domain homologue US-10-321-857-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: SITE

CCATION: (1)..(44)

CTHEN INFORMATION: AcmA cell wall binding domain homologue
US-10-318-675-22
                                                                                                      TYPE: PRT
ORGANISM: Lactococcus bacteriophage Tuc2009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Lactococcus bacteriophage Tuc2009
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 22
LENGTH: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-424-599-240616
                                                                                                                                                                                                                            NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-10-318-675-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

ä

Gaps

TITLE OF INVENTION: 123 Human Secreted Proteins FILE REFERENCE: PZ010P1

```
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08

PRIOR PLICATION NUMBER: EARLIER FILING DATE: 1997-07-08

PRIOR PLICATION NUMBER: EARLIER FILING DATE: 1997-07-08

PRIOR PARTING DATE: EARLIER FILING DATE: 1997-07-08

PRIOR PAPLICATION NUMBER: EARLIER PILLING DATE: 1997-07-08

PRIOR PAPLICATION NUMBER: EARLIER FILING DATE: 1997-07-08

PRIOR PAPLICATION NUMBER: EARLIER PILLING DATE: 1997-07-08

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/051,930

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/051,930

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/051,930

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,733

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,733

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,733

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,735

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,735

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,735

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/052,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,949

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,947

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,964

PRIOR PAPLICATION NUMBER: EARLIER PAPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 45; DB 10;
Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 27.3%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 399
LENGTH: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens
US-09-983-802-399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS
```

```
PCT/US98/13684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/058,661
                                         COUNGARY TILLING DATE: BARLIER PILLING DATE: 1997-01-06
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-01-06
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-01-07
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-01-07
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-07-06
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-07-08
PRIOR PAPILCATION NUMBER: EARLIER APPLICATION NUMBER: 60/(
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-07-08
PRIOR PRIDGE CANDER BARLIER FILLING DATE: 1997-07-08
PRIOR PRIDGE CANDER BARLIER FILLING DATE: 1997-07-08
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-07-08
PRIOR PLING DATE: BARLIER FILLING DATE: 1997-07-08
PRIOR PLING DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PLING DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE CANDER: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRIDGE DATE: 1997-07-08
PRIOR PRIDGE DATE: BARLIER PRI
CURRENT APPLICATION NUMBER: US/09/984,490 CURRENT FILING DATE: 2001-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
```

LWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52 | | | | | : | : : | : : : | : : : | | LWNRNQ----MMHSIIVKELIVTFFLGITVLLL 31

20

a ઠે

RESULT 11
US-09-984-490-399
Sequence 399, Application US/09984490
; Publication No. US20030064412A1
; GENERAL INFORMATION:

7; Mismatches

```
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Cao Vihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 284397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ص
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.8%; Score 43.5; DB 15; Length 31; larity 37.5%; Pred. No. 2.1e+02; Conservative 7; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 16.4%; Score 45; DB 11; Length 37 Best Local Similarity 27.3%; Pred. No. 1.7e+02; Matches 9; Conservative 7; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Clone ID: PAT_MRT3847_98836C.1.pep
US-10-424-599-284397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 LWNRNQ----MMHSIIVKELIVTFFLGITVLLL 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 LWINNIQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                          PRIOR APPLICATION NUMBER: 60/055,950
PRIOR FILING DATE: 1997-08-18
PRIOR FILING DATE: 1997-08-18
PRIOR FILING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,964
PRIOR APPLICATION NUMBER: 60/056,360
PRIOR FILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PLILING DATE: 1997-08-18
PRIOR PLILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-08-18
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
PRIOR PRILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 284397, Application US/10424599; Publication No. US20040031072A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 WINNOT---OLFLEHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 WDNSRTYLVQFILENQLLSLSASK 28
                                       FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,950
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-973-278-509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 9; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-424-599-284397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                              ij
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                              Length 37;
                                                                                                                                                                                                                                                                                                        13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 509, Application US/0997378
Publication No. US20040044191A1
GENERAL INFORMATION: 123 Human Secreted Proteins
FILE FUNKENTYON: 123 Human Secreted Proteins
FILE FREEKENCE: PZ010P2
CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-13
PRIOR APPLICATION NUMBER: 06/227,357
PRIOR APPLICATION NUMBER: 06/227,357
PRIOR FILING DATE: 1999-01-08
PRIOR PLING DATE: 1999-01-08
PRIOR PLING DATE: 1999-07-08
PRIOR PLING DATE: 1999-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-07-08
PRIOR PLING DATE: 1997-08-18
PRIOR PLING DATE: 1997-08-18
PRIOR PLING DATE: 1997-08-18
PRIOR PLING DATE: 1997-08-18
PRIOR PLING DATE: 1997-08-18
                                                                                                                                                                                                                                              Score 45; DB 10;
Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                               20 LWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                    ||| || : ||:: : |
LWNRNQ----MMHSIIVKELIVTFFLGITVLLL 31
                                                                                                                                                                                                                                           h 16.4%; Score 45; DB 1 Similarity 27.3%; Pred. No. 1.70+9; Conservative 7; Mismatches
NUMBER OF SEQ ID NOS: 672
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 399
                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-984-490-399
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

1;

```
Job time : 32.4656 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 195017
Sequence 195017
Sequence 195017, Application US/10437963
Sequence 195017, Application US/10437963
Sequence 195017, Application US/10437963
Sequence 195017, Application No. US20040123343A1
GENERAL INFORMATION:
APPLICANT: Cao, Vinua
APPLICANT: Cao, Vinua
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
APPLICANT: Boukharov, Andrey A.
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5321)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 195017
     Sequence 166786, Application US/10437963
; Sequence 166786, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: APPLICANT: Applicant: Wu, Wei
; APPLICANT: Wu, Wei
; APPLICANT: Wu, Wei
; APPLICANT: Butharov, Andrey A.
; APPLICANT: Butharov, Andrey A.
; APPLICANT: Butharov, Rad
; APPLICANT: Butharov, Rad
; APPLICANT: Butharov, Rad
; APPLICANT: Butharov, Rad
; APPLICANT: Butharov, Rad
; APPLICANT: Butharov, Rad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; TITLE RING DATE: 2003-05-14
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 166786
; LENGTH: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 15.8%; Score 43.5; DB 16; Length 42; Best Local Similarity 47.8%; Pred. No. 3.1e+02; Matches 11; Conservative 6; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
COTHER INFORMATION: Clone ID: PAT_MRT4530_65460C.1.pep
US-10-437-963-166786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Clone ID: PAT_MRT4530_91005C.1.pep
US-10-437-963-195017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
15.8%; Score 43.5; DB 16;
Best Local Similarity 35.3%; Pred. No. 3.3e+02;
Matches 12; Conservative 8; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 WNNNOTOLFLEHSL - LTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Oryza sativa
RESULT 14
US-10-437-963-166786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

search completed: June 29, 2005, 10:14:20

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence

OM protein

Run on:

Sequence:

Minimum DB Maximum DB

Searched:

Database :

Result No.

```
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
US-09-282-0234-471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 470, Application US/09282029A

Patent No. 6723700
GENERAL INFORMATION
GENERAL INFORMATION
APPLICANT: Blaschuk, Orest W.
APPLICANT: Gour, Barbara J.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING CLAUDIN-MEDIATED
TITLE OF INVENTION: FUNCTIONS
FILE REFERENCE: 100086.409C1
CURRENT FILING DATE: 1999-03-30
NUMBER OF SEQ ID NOS: 480
SSCTWARE: Patentin Ver. 2.0
SSCTWARE: 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 4;
                                                             US-09-721-456-92
US-08-81-643A-151
US-08-874-549A-271
US-08-974-523-151
US-09-430-323-151
US-09-721-456-271
US-09-721-456-271
US-09-766-253-151
US-08-851-843A-146
US-08-874-549A-264
US-08-974-549A-264
US-08-974-549A-264
US-08-974-549A-264
US-09-721-456-264
US-09-721-456-264
                      -08-912-951-92
-09-402-181B-92
-09-721-456-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 52.5; D
Pred. No. 3.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19.1%; Score 52.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 LWNNNQTQLFLEHSLLTANTT-KGIYAGVCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.18;
                                                   446664446664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CORGANISM: Mus musculus
US-09-282-029A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12, Conserv
US-09-282-029A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-282-029A-471
Query Match
ઢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22, Appl
22, Appl
22, Appl
24, Appl
244, App
244, App
244, App
244, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
16, Appl
17, Appl
17, Appl
18, Appl
18, Appl
19, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11, Appl
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 470, App
Sequence 471, App
Sequence 470, App
                                                                                                                                                        June 29, 2005, 09:33:11; Search time 9.39882 Seconds (without alignments) 413.004 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence Sequence Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence (
                                                                                                                                                                                                                                                                                                 1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Issued Patents AA:*

. /cgn2 6/ptodata/1/iaa/5A_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/6A_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/6A_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/6B_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/PCTUS_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/PCTUS_COMB.pep:*
   /cgn2 6/ptodata/1/iaa/PCTUS_COMB.pep:*
                      5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-282-029A-470
US-09-282-029A-471
US-09-434-355A-471
US-08-134-355A-471
US-08-312-643-22
US-08-312-643-22
US-08-312-643-24
US-08-218-025-244
US-08-473-089-244
US-08-473-089-244
US-08-473-089-244
US-08-473-089-244
US-08-488-228-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-08-318-025A-65
US-09-317-228-029A-6
US-09-317-228-029A-6
US-09-317-228-03A-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -08-190-802A-123
-08-477-346-123
-08-473-089-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-473-089-123
US-08-487-072A-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                       513545 segs, 74649064 residues
                      GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                        US-10-718-321-7_COPY_249_300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length: 0
seq length: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .......
                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
42
41.5
```

'n,

Gapa

5

Indels

```
CITY: Chicago
STATE: Illinois
                                                                                                                                 USA
                                                                                                                                             90909
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-332-643-22
                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ٠.
س
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3,
                                                                                                                                        Sequence 470, Application US/09434355A

Sequence 470, Application US/09434355A

GENERAL INFORMATION

APPLICANT: Blaschuk, Orest W.

APPLICANT: James Mathew Symonds

APPLICANT: Gour, Barbara J.

TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING CLAUDIN-MEDIATED

TITLE OF INVENTION: PUNCTIONS

FILE REFERENCE: 100086.409C2

CURRENT APPLICATION NUMBER: US/09/434,355A

CURRENT FILING DATE: 1999-11-03

NUMBER OF SEQ ID NOS: 531

SOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
2
                ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
19.1%; Score 52.5; DB 4; Length 30;
Best Local Similarity 38.7%; Pred. No. 3.6;
Matches 12; Conservative 8; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4; Length 30;
                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                9
                                          20 LWNNNQTQLFLEHSLLTANTT-KGIYAGVCI 49
                                                              2 MW---QVTAFLDHNIVTAQTTWKGLWMS-CV 28
Best Local Similarity 38.7%; Pred. No. 3.6; Matches 12; Conservative 8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 LWNNNQTQLFLEHSLLTANTT-KGIYAGVCI 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 52.5; D
Pred. No. 3.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 LWNNNQTQLFLEHSLLTANTT-KGIYAGVCI 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 22, Application US/08188228; Patent No. 5597725; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 38.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , ORGANISM: Homo sapien
US-09-434-355A-471
                                                                                                                RESULT 3
US-09-434-355A-470
                                                                                                                                                                                                                                                                                                                                                                                               US-09-434-355A-470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
US-08-188-228-22
                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 45.5; DB 1; Length 40;
Pred. No. 45;
5; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----SSLESGTTEG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22, Application US/08332643
Patent No. 5639634
GENERAL INFORMATION:
APPLICANT: SUZUKI, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Bicknell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: Two First National Plaza, 20 South Clark STREET: Street
                        CADHERIN MATERIALS AND METHODS
                                                                                             ADDRESSEE: Marshall, O'Toole, Gerstein, Murray ADDRESSEE: Borun
                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PatentIn Release #1.0, Version #1.25
                                                                                                                                            6300 Sears Tower, 233 S. Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION 1435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/049,460
FILING DATE: 19 APR 1993
PRIOR APPLICATION NUMBER: US 07/872,643
APPLICATION NUMBER: US 07/872,643
ATTORNEY/AGENT INFORMATION:
NAME: No. 5597725and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22:
APPLICANT: SUZUKİ, Shintaro
TITLE OF INVENTION: CADHERIN
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (312) 474-6300
(312) 474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16.5%;
31.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | :| :||:| ||
2 LATYAYEGNDSVAESL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 16.5
Best Local Similarity 31.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-188-228-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIREDA.
CITY: Chicago
STATE: Illinois
```

```
APPLICATION NUMBER: 60/055,964
                  TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-332-638-22
         amino acid
                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                      US-09-227-357-399
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----SSLESGTTEG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-332-638-22
; Sequence 22, Application US/08332638
; Sequence 22, Application US/08332638
; GENERAL INFORMATION:
    APPLICAMY: Suzuki, Shintaro
    TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
    NUMBER OF SEQUENCES: 62
    CORRESPONDENCE ADDRESS:
    ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,638
FILING DATE: 01-NOV-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/872,643
FILING DATE: 17 APR 1992
APPLICATION NUMBER: US/08/049,460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 16.5%; Score 45.5; DB 1; Best Local Similarity 31.7%; Pred. No. 45; Matches 13; Conservative 5; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 6300 Sears Tower, 233 S. Wacker Drive CITY: Chicago STATE: Illinois
                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/872,643
ATTORNEY AGENT INPORMATION:
NAME: No. 5638634and, Greta E.
REGISTRATION NUMBER: 35,302
REGISTRATION NUMBER: 27866/30795
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 346-5750
TELEPHONE: (312) 984-9740
TELER: 25-3856
INFORMATION FOR SEQ ID NO: 22:
ESEQUENCE CHARACTERISTICS:
LENGTH: 40 aming acids
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: No. 5646250and, Greta E. REGISTRATION NUMBER: 35,302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
TELER: 25-3856
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | :| :||:|||
2 LATYAYEGNDSVAESL--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                  CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-332-643-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               а
```

```
Gaps
                                              15;
Score 45.5; DB 1; Length 40; Pred. No. 45;
                                                 8; Indels
                                                                                             2 LYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                         2 LATYAYEGNDSVAESL ------SSLESGTTEG 27
                                                                                                                                                                                                                                                      Sequence 399, Application US/09227357
Patent No. 6342581
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: 123 Human Secreted Proteins;
FILE REFERENCE: PS2010P1
CURRENT APPLICATION NUMBER: US/09/227,357
CURRENT FILING DATE: 1999-01-08
SEALLER PLING DATE: 1998-07-07
SEARLIER PLING DATE: 1998-07-07
SEARLIER APPLICATION NUMBER: 60/051,926
                                                 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,930
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,928
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ILING DATE: 1997-07-08
PPLICATION NUMBER: 60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-08-18
ch 16.5%;
il Similarity 31.7%;
13; Conservative :
```

ï

```
Gaps
                                                                                                                                                                                                                DB 1; Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 3; Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 244, Application US/08477346

Sequence 244, Application US/08477346

Patent No. 6262033

GENERAL INFORMATION:
APPLICANT: Mochly-Rosen, Daria
APPLICANT: Mochly-Rosen, Daria
APPLICANT: Mochly-Rosen, Daria
APPLICANT: MO-40 - Derived Peptides and Uses
TITLE OF INVENTION: Thereof
INTELE OF INVENTION: Thereof
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Morrison & Foerster
STREET: 2000 Pennsylvania Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Indels
                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER: DCCUMPER:
                                                                                                                                                                                                                                                                                 .,
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
16.2%; Score 44.5; D
Best Local Similarity 40.9%; Pred. No. 44;
Matches 9; Conservative 5; Mismatches
                                                                                                                                                                                                             Query Match 16.2%; Score 44.5; I
Best Local Similarity 40.9%; Pred. No. 44;
Matches 9; Conservative 5; Mismatches
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
US-08-190-802A-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
                                                                                                                                                                                                                                                                                                                                                  4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 AYSPÖGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 SYTTDGNDTVTESSDG---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Washington
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-477-346-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-477-346-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-190-802A-244

| Sequence 244, Application US/08190802A
| Patent No. 551903
| GENERAL INFORMATION:
| APPLICANT: Mochly-Rosen, Daria APPLICANT: Ron, Dorit
| TITLE OF INVENTION: WD-40 - Derived Peptides and Uses TITLE OF INVENTION: Thereof
| NUMBER OF SEQUENCES: 265 |
| CORRESPONDENCE ADDRESS: ADDRESSEE: ADDRESSEE: Dehilinger & Associates STREET: P.O. Box 60850 |
| CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
16.4%; Score 45; DB 3; Length 37;
Best Local Similarity 27.3%; Pred. No. 47;
Matches 9; Conservative 7; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-UCS/MS-LUCS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,802A
FILING DATE: 01-FEB-1994
CLASSIPICATION: 530
ATTONNEY/AGENT INPORMATION:
NAME: Fabian, Gary R:
REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 324-0860
TELECOMMUNICATION INPORMATION:
TELEPAK: (415) 324-0860
INFORMATION FOR SEQ ID NO: 244:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | | | | | | : | | : : | : : : | : : : | 31 | STANDANO----MMHSIIVKELIVTFFLGITVLLL 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 LWNNNOTOLFLEHSLLTANTTKGIYAGVCISVL 52
                                                             EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-08-18
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: PALENTLY OF NOWER: 60/058, 661
SEQ ID NO 399
LENGTH: 37
TYPE: PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94306-0850
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COmpatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-09-227-357-399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
```

셤

```
Sequence 65, Application US/08218025A

Sequence 65, Application US/08218025A

Patent No. 5556744

GENERAL INFORMATION:
APPLICANT: Weiner, David B.
APPLICANT: Weiner, David B.
APPLICANT: Williams, William V.
TITLE OF INVENTION: Methods and Compositions for Diagnosing
TITLE OF INVENTION: and Treating Certain HIV Infected Patients
NUMBER OF SEQUENCES: 197

CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: P.O. BOX 457, 321 No. 5556744ristown Road
CITY: Spring House
STATE: Pennsylvania
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,072A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
ATTONEV/AGENT INFORMATION:
NAME: MURASHIGE, RATE H.
REGISTRATION NUMBER: 2550-0025.20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 887-1500
TELEFAK: (202) 887-1500
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1503
TELEFAK: (202) 887-1633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44.5; DE Fred. No. 44; 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEDLICATION NUMBER: US/08/218,025A FILING DATE: 24-MAR-1994 CLASSIFICATION: 424 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 07/891,451 FILING DATE: 29-MAY-1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 AYSPDGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: WE
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 540-9206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 40.9%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 SYTTDGNDTVTESSDG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                            unknown
                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-487-072A-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-218-025A-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 244, Application US/08487072A
Fatent No. 6423684
GENERAL INFORMATION:
APPLICANT: Mochly-Rosen, Daria
APPLICANT: Ron, borit
TITLE OF INVENTION: WD-40 - Derived Peptides and Uses;
TITLE OF INVENTION: Thereof
NUMBER OF SEQUENCES: 265
CORRESPONDENCE ADDRESS:
                                Sequence 244, Application US/08473089
Patent No. 6342368
GENERAL INFORMATION:
APPLICANT: Mochly-Rosen, Daria
APPLICANT: Ron, Dorit
APPLICANT: Ron, Dorit
TITLE OF INVENTION: Wb-40 - Derived Peptides and Uses
TITLE OF SEQUENCES: 265
CORRESPONDENCE ADDRESS:
ADDRESSEE: Morrison & Foerster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
FILING DATE: US/08/473,089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  illarity 40.9%; Score 44.5;
Conservative 5; Miamater
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANTI-SENSE: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: YCU7 rI, Fig. 48
                                                                                                                                                                                                                                                                                 2000 Pennsylvania Avenue, NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 2000 Pennsylvania Avenue, NW CITY: Washington
                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 20006-1812
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 AYSPDGSRVVTASEDGKIKVWD 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---LWN 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Morrison & Foerster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (202) 887-0763
INFORMATION FOR SEQ ID NO: 244:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 SYTTDGNDTVTESSDG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                STREET: Zuro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CIT:
STATE: D.
COUNTRY: USA
TO: 20006-1812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-487-072A-244
                 US-08-473-089-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-473-089-244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

.. ..

```
Sequence 16, Application US/08332643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                               ij
                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                               8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 15.3%; Score 42; DB 1; Length 40; Best Local Similarity 39.1%; Pred. No. 1.3e+02; Matches 9; Conservative 5; Mismatches 9; Indels
                                                                                                                                 Score 44; DB 1; Length 20;
Pred. No. 29;
4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                   Sequence 16, Application US/08188228
Patent No. 5597725
GENERAL INFORMATION:
APPLICANT: SUZUK; Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 6300 Sears Tower, 233 S. Wacker Drive CITY: Chicago STATE: Illinois COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIPECATION: 435
CLASSIPECATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/049,460
FILING DATE: 19 APR 1993
PRIOR APPLICATION DATA: 07/872,643
APPLICATION NUMBER: US 07/872,643
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5597725and, Greta E.
REGISTRATION NUMBER: 35,302
REGISTRATION NUMBER: 35,302
REGISTRATION NUMBER: 31340
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION 118704448
TELEPHONE: (312) 474-6300
TELEPHONE: (312) 474-6448
TELERAX: 25-3856
INFORMATION FOR SEQ ID NO: 16:
                                                                                                                                                                                                                                                  2 PLFNSTWNGNNT------WNN 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LQTYAFEGNGSVAESLSSLDSNS 24
                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNN 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 LYSYTTDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                 Query Match
Best Local Similarity 39.1%;
Matches 9; Conservative 4
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40 amino acids
                    TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                , MOLECULE TYPE
US-08-218-025A-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-08-188-228-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-188-228-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
```

RESULT 15 US-08-332-643-16

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 39.1%; Pred. No. 1.3e+02;
Matches 9; Conservative 5; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC Compatible
COMPUTER: DEAD PC COMPUTER: DC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,643
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/872,643
PATENT NO. 5639634
GENERAL INFORMATION:
APPLICANT: SUAUKI, Shintaro
TITUE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Bicknell
STREET: Two First National Plaza, 20 South Clark
STREET: Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: No. 5639634and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 27866/30795
TELEPHONE: (312) 346-5750
TELEPACOM (312) 346-5750
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search completed: June 29, 2005, 09:49:08 Job time: 9.39882 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 LYSYTTDGNDTVTESSDGLWNNN 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 LOTYAFEGNGSVAESLSSLDSNS 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                              STREET: Street
CITY: Chicago
STATE: Illinois
COUNTRY: USA
```

```
June 29, 2005, 09:03:05; Search time 35.5521 Seconds (without alignments) 565.693 Million cell updates/sec
                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                   938430
5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                             2105692 seqs, 386760381 residues
   version - 2005 (
                                                                                                                                                                                  US-10-718-321-7_COPY_249_300
                                                                        protein search, using sw model
                                                                                                                                                                                                                                                        BLOSUM62
Gapop 10.0 , Gapext 0.5
   GenCore
(c) 1993
                    Copyright
                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                   Perfect score:
                                                                        OM protein
                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                        Seguence:
                                                                                                            Run on:
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries geneseqp2003as:* geneseqp2003bs:* geneseqp2004s:* A_Geneseq_16Dec04:* geneseqp2000s:* geneseqp2001s:* geneseqp2002s:* geneseqp1980s:* geneseqp1990s:* Database

length: 0 length: 50

Bed

88

Minimum Maximum the number of results predicted by chance to have a r than or equal to the score of the result being printed, ed by analysis of the total score distribution. score greater than or equal to and is derived by analysis of Pred. No.

Monoclona Human KIM Human KIM Human sec Human sec Human sec AcmA-type Human dig Rat cadhe Rat cadhe Human sec Human sec Lys repea Bacteriop Human sec Novel hum Human pro OSPF-rela Peptide r HIV pepti Aao26686 Human KIM Aao26687 Human KIM Staphyloc Description Aao26673 Aao26688 Ada98306 Ada98306 Ada44132 Ada10760 Adi10760 Adi207403 Adi307403 Adi3069 Adi3069 Adi3069 Adi3069 Adi3069 Adi3069 Adi3069 Adw13116 | Ada07578 | Adn41387 | Aar85818 Aaw08045 Adf70018 Aab56453 Adi95222 SUMMARIES AAB56453 AD195222 AAR43565 AAO26685 ADA98306 ADA44132 ADC20470 ADF10760
AAB29810
AAB29810
AAY13969
AAY13969
ABR83729
ABR83729
ABR93729
AAM92081
AAW25651
AAW26818
AAW1387
AAW808045 Length Query Match 45.5 45.5 45 45 43 42.5 42 48.5 Score 44.5 Result Š.

•	
ggn huno, 0 4	BGS-3 asp Human int
Aaw25648 Aar3113 Adf3059 Aar48789 Abr8924 Abr8924 Adf59379 Adf01079 Aaw67315 Adf60572 Adf60572 Adf60572 Adf60574 Adf60574 Adf60574 Adf60574 Adf60574 Adf60574 Adf60574 Adf60574 Adf911026 Adf911026	Ade03490 Ade10179
AAW25648 AAW13113 AAW13113 AAW131089 AAW187089 AAW18789 AAW18789 AAW18789 AAW67126 AAW67809 AAW67809 AAW67809 AAW67809 AAW67809 AAW67809 AAW67809 AAW24315 AAW24315	ADE03490 ADO10179
44444444444444444444444444444444444444	L 80
4 4 4 4 6 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6	14 14
$\begin{matrix} \mathbf{u} & \mathbf{u} $	14.5
4444 111111 44444 44444444444444	4 4 0 0
00000000000000000000000000000000000000	4 4 4 5

ALIGNMENTS

Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer. Human KIM-1 mucin domain related peptide, SEQ ID No 14 \$ AAO26686 standard; peptide; 18 31-MAY-2002; 2002WO-US017402. 01-JUN-2001; 2001US-0295449P. (BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP. (first entry) Bailly V, Bonventre J; WPI; 2003-156845/15 WO200298920-A1 20-MAR-2003 12-DEC-2002. Synthetic. AA026686; AA02668

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer

Disclosure; Fig 1A; 42pp; English.

The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble stangery didney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal zoncer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention

Rat cadhe

Aar43565

g

RESULT 2

음

```
binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a binding epitope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel antibody, antibody derivative or antigen
                                                                                                                                                                                                                                                                                                                                                                                                                    New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                            Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; binding epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36.0%; Score 99; DB 6; Length 18; 100.0%; Pred. No. 2.5e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human KIM-1 mucin domain related peptide, SEQ ID No 16.
                                                                    Monoclonal antibody binding epitope, SEQ ID No 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAO26688 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 25; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 SSDGLWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                              31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                         01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SSDGLWINNOTQLFLEHS
                                         (first entry)
                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    e.g. renal cancer.
                                                                                                                                                                                      WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200298920-A1
                                         20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAR-2003
                                                                                                                                                                                                                 12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                             Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
            AA026673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA026688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                        Gaps
                                                                                                                                                                                                                                                                                                   Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                         Score 101; DB 6; Length 18;
Pred. No. 1.4e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 99; DB 6; Length 18;
Pred. No. 2.5e-05;
                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                           Human KIM-1 mucin domain related peptide, SEQ ID No 15.
                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAO26673 standard; peptide; 18 AA.
                                                                                                                                                                                    AAO26687 standard; peptide; 18 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 1A; 42pp; English.
                            36.,
100.0%; Fi.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36.00
100.0%; Pre
                                                                                   7 TDGNDTVTESSDGLWNNN 24
                                                                                                    1 TDGNDTVTESSDGLWNNN 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 SSDGLWNNNQTQLFLEHS 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-2001; 2001US-0295449P, 04-JUN-2001; 2001US-0295907P,
                         36.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSDGLWNNNQTQLFLEHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                              (first entry)
                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bonventre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e.g. renal cancer.
Ą.
                                                                                                                                                                                                                                                                                                                                                                                           WO200298920-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 AA;
                                                                                                                                                                                                                                              20-MAR-2003
Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-2002
                                                        18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bailly V,
                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                 AA026687;
                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
AAO26673
ID AAO2
```

ö

Gaps

ö

ठ ద ö

Gaps

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule. I (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal ancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention comprises the amino acid and coding sequence of human secreted proteins. The DNA and protein sequences of the invention are useful in the treatment of cardiovascular disorders, such as: arrhythmia, atherosclerosis, stroke, endocarditis, congestive heart failure,
New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; secreted protein; cardiovascular disorder; arrhythmia; atherosclerosis; stroke; endocarditis; congestive heart failure; rheumatic heart disease; cardiomyopathy; hemorrhoids; varicose veins; migraine; thrombosis; neural disorder; immune system disorder; muscular disorder; reproductive disorder; gastrointestinal disorder; pulmonary disorder; renal disorder; proliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New human secreted polypeptide and nucleic acid molecules, useful for diagnosing, preventing, prognosticating or treating cardiovascular disorders (e.g. arrhythmia, atherosclerosis, cardiomyopathy, or
                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                  29.8%; Score 82; DB 6; 100.0%; Pred. No. 0.0034; ive 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 414; 1572pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human secreted protein sequence #147.
                                                                              Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADA98306 standard; protein; 43 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-2002; 2002WO-US009922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-MAR-2001; 2001US-0278650P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-SEP-2001; 2001US-00950082
12-SEP-2001; 2001US-00950083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                   1 PLYSYTTDGNDTVTE 15
                                                                                                                                                                                                                                                                                                                                                                                 PLYSYTTDGNDTVTE 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                   15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-247946/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ruben SM;
                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                               e.g. renal cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003004623-A2.
                                                                                                                                                                                                                                                      Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        thrombosis)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADA98306;
                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA98306
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                              The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain related
                                                                                                                                                                                                                   New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human KIM-1 mucin domain related peptide, SEQ ID No 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 6; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 90; DB 6; Pred. No. 0.00 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32.7%; Scu.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAO26685 standard; peptide; 18 AA
                                                                                                                                                                                                                                                                                                  Disclosure; Fig 1A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTOLFLEHSLLTANTTKG 18
                                                           01-JUN-2001; 2001US-0295449P.
                             31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002WO-US017402.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2001; 2001US-0295449P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QTQLFLEHSLLTANTTKG
                                                                                                         (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
Les 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            peptide of the invention
                                                                                                                                                        Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bailly V, Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-156845/15.
                                                                                                                                                                                      WPI; 2003-156845/15
                                                                                                                                                                                                                                                                      renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200298920-A1.
12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA026685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                      e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAO26685
ઠે
```

ί,

Gaps

7

4; Mismatches 13; Indels

25

14; Conservative

Matches

8 8

```
ï
rheumatic heart disease, cardiomyopathy, haemorrhoids, varicose veins, migraine, or thrombosis. The DNA and protein sequences may also be used for treating or preventing: neural disorders, immune system disorders, muscular disorders, reproductive disorders, gastrointestinal disorders, pulmonary disorders, renal disorders, proliferative disorders and/or secreted siseases. The present amino acid sequence represents a human secreted protein of the invention. NOTE: The present sequence is shown on the WIPO website.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to novel genes and their fragments which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids and proteins are useful in the diagnosis, treatment and prevention of conditions related to diabetes, e.g. hyperglycaemia, obesity, retinopathy, polyneuropathy, atherosclerosis, anaemia, stroke, gangrene, impotence, infection, cataract, renal disorders, or endocrine disorders. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A human secreted protein and nucleic acids useful for preparing a diagnostic or pharmaceutical composition for diagnosing or treating diabetes or conditions related to diabetes, e.g. hyperglycemia, obesity,
                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene therapy, human, Antidiabetic, Anorectic, Ophthalmological, Neuroprotective, Cerebroprotective, Antianemic.
                                                                                                                                                                                                                            5;
                                                                                                                                                                                           Length 43;
                                                                                                                                                                                       Score 49; DB 6; 1
Pred. No. 1.3e+02;
4; Mismatches 13,
                                                                                                                                                                                                                                                                               20 LWINNOTOLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 324; 701pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human secreted protein SEQ ID 324
                                                                                                                                                                                                                            4;
                                                                                                                                                                                                                                                                                                                                                                                  ADA44132 standard; protein; 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2001; 2001US-0278650P.
12-SEP-2001; 2001US-00950082.
12-SEP-2001; 2001US-00950083.
                                                                                                                                                                                           17.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-2002; 2002WO-US009105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  retinopathy, neuropathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rosen CA, Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-184045/18.
                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; ADA43942.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003000865-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 43 AA;
                                                                                                                                                           Sequence 43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2003
                                                                                                                                                                                                                            14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                    ADA44132;
                                                                                                                                                                                            Query Match
                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ношо
                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                               RESULT 7
     888888888
                                                                                                                                                                                                                                                                                                                                                                                 셤
```

Length 43;

Score 49; DB 6; Pred. No. 1.3e+02;

17.8%;

Query Match Best Local Similarity

```
ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention comprises the amino acid and coding sequences of human secreted proteins. The DNA and protein sequences of the invention are useful for detecting, preventing, diagnosing, prognosticating, traating or ameliorating; haematopoietic or haematological disorders (e.g. anaemia and haemophilia); inflammatory disorders (e.g. inflammatory bowel disease and crohn's disease); neoplastic disease (e.g. cancer and leukaemia); wound healing and disorders of epithelial cell proliferation; immune disorders (e.g. autoimmune disorders and asthmatic disorders); and disorders (e.g. atheroselerosis and myocardiis); inflectious disease (e.g. HIV/MIDS); endocrine disorders (e.g. diabetes); and gastrointestinal disorders (e.g. diabetes);
                                                                                                                                                                                  gene therapy, human, secreted protein, haemopoietic disorder; haematological disorder; anaemia; haemophilia; inflammatory disorder; inflammatory bowel disease; Crohn's disease; neoplastic disease; cancer; leukaemia; wound healing; epithelial cell proliferation disorder; immune disorder; autoimmune disorder; asthmatic disorder; cardiovascular disorder; atherosclerosis; myocarditis; infectious disease; HIV; AIDS; endocrine disorder; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gastroenteritis). The present amino acid sequence represents a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing, preventing or treating hematopoietic or hematologic disorders, e.g. anemia or hemophilia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                      gastrointestinal disorder; duodenal ulcer; gastroenteritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Indels
                                                                                                                                                 Human secreted protein - amino acid sequence #151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 49; DB 7;
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 LWINNIQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 424; 1512pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted protein of the invention.
                                     ADC20470 standard; protein; 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2001; 2001US-0278650P.
12-SEP-2001; 2001US-00950082.
12-SEP-2001; 2001US-00950083.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-2002; 2002WO-US009257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17.8%;
                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 17.8
Best Local Similarity 42.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-129287/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                  WO200292787-A2
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                             18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                     21-NOV-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rosen CA,
RESULT 8
                                                        ð
```

22

20 LWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL

ઠે

3 LWKCGRTT--LRASLLMIFTSCSWWLGVCLSVL 33

```
Claim 1; SEQ ID NO 223; 855pp; English
                                                               ADF10760 standard; protein; 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-SEP-2001; 2001US-00950082.
12-SEP-2001; 2001US-00950083.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2002; 2002WO-US009135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-MAR-2001; 2001US-0278650P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                   Human secreted protein #82
                                                                                                                                                                                 12-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rosen CA, Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-221310/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200299085-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-DEC-2002.
                                                                                                                           ADF10760;
                               ADP10760
XX
AC
ADP1
XXX
AC
ADP1
XXW
ADP1
XXW
ADP1
XXW
ADD
XXW
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX
ADD
XXX

RESULT 9
```

```
ं ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to an isolated polypeptide chosen from 123 human secreted proteins, such as, HGEDM64, HBHAA05, HBJCR46, HBJCD16, HCMMSX1, HCGBHT2, HDGBHT2, HDGBHT2, HDGBHT2, HDGBHT3, HCGBHT91 and HLDGUT9. The polypeptides are useful for the preparation of a diagnostic or preventing diseases or conditions, such as neural, immune system, muscular, reproductive, disaction for diagnosing or and are useful for treating cor preventing diseases or conditions, such as neural, immune system, muscular, reproductive disorders and cancerous diseases and conditions. The polypeptides have immune activity, chemotactic activity, and binding activity, to treat and prevent neuronal damage which occurs in certain neuronal disorders or neuro-degenerative conditions such as Alzheimer's disease, Parkinson's disease, and acquired immunodeficiency syndrome (AIDS)-related complex, and to prevent skin aging due to sunburn by stimulating keratinocyte growth. The molecules are also useful to modulate mammalian characteristics including. The encoding sequences are therapy, for identifying individuals from minute biological samples, as additional DNA markers for restriction fragment length polymorphism (RRLP), in forensic piology, molecular weight markers on Southern gels, and diagnostic probes for the presence of a specific mRNA in a particular cellitype, to raise anti-DNA antibodies using DNA immunization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human secreted polypeptides for diagnosing and treating neural, immune system, muscular, reproductive, gastrointestinal, cardiovascular, renal, and proliferative disorders and cancerous diseases.
HGEDM64; HBHAA05; HBJCR46; HBJKD16; HCMSX51; HCQBH72; HDPPQ30; HE2CM39; HBSBA10; HGBHP91; HLDQU79; Cytostatic; Hepatotropic; Antidiabetic; Antidiammatory; neuroprotective; Anti-HIV; Vulnerary; Gynecological; Antinifertility; Gene therapy; gastrointestinal disorder; cancer; Alzheimer's disease; chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence represents a human secreted protein of the invention.
```

```
Sequences AAB29802-B29850 represent the amino acid sequences of 49 human secreted proteins encoded by the genes AAC63410-C63458. The genes and proteins are useful for preventing, ameliorating or treating medical conditions, e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant) agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer, and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, analtiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing
                                                                                                                                                                                                                                                    Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic; cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder; neurological disease; infection; human; secreted protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isolated nucleic acid molecule encoding a human secreted protein is used in preventing, treating or ameliorating a medical condition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and infectious diseases such as viral, bacterial, fungal and parasitic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17.8%; Score 49; DB 3; Length 44; 42.4%; Pred. No. 1.40+02; ive 4; Mismatches 13; Indels
3 LWKCGRTT--LRASLIMIFTSCSWWLGVCLSVL 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 LWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LWKCGRTT -- LRASLLMIFTSCSWWLGVCLSVL 33
                                                                                                                                                                                                                   Human secreted protein SEQ ID NO: 68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Komatsoulis G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11; Page 431; 495pp; English.
                                                                                                 AAB29810 standard; protein; 44 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-APR-2000; 2000WO-US009068.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-APR-1999; 99US-0128699P.
20-JAN-2000; 2000US-0177050P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-647424/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAC63418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 44 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                   WO200061779-A1.
                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                             09-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rosen CA,
                                                                                                                                      AAB29810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                           RESULT 10
                                                                               AAB29810
                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

1,

RESULT 11

ä

Gaps

; 3

Score 49; DB 7; Length 43; Pred. No. 1.3e+02; 4; Mismatches 13; Indels

Query Match
Best Local Similarity 42.4%;
Matches 14; Conservative

1 LYFFTLQQNPSFIQCSEGVLKNSLQSAIFVLDPLLT 36

φ

```
The invention describes an isolated nucleic acid comprising a nucleotide sequence with any of 3772 fully defined nucleotide sequences (SEQ ID NO: 1-3772) and encoding an Staphylococcus epidermidis polypeptide with any of 3772-fully defined anino acid sequences (SEQ ID NO: 3772-7544) as given in the specification. Also described are: a recombinant expression vector; a cell comprising a recombinant expression vector of (1); producing an S. epidermidis polypeptide; an isolated nucleic acid comprising a nucleotide sequence of at least 8 nucleotides in length; a vaccine composition for prevention or treatment of an S. epidermidis infection, a subject for S. epidermidis infection; a subject for S. epidermidis infection; a recombinant or substantially infection; detecting the presence of a Staphylococcus substantially sample; a computer readable medium having recorded in it the nucleotide sequences with SEQ ID NO: 1-3772 or its fragments; a computer readable medium having recorded in it the nucleotide system for identifying fragments of commercial importance; a computer based system for identifying fragments of the Staphylococcus genome of sommercially important nucleic acid fragments of the Staphylococcus genome and/or plasmids of commercial for the diagnosis, genome and/or plasmids; and identifying an expression modulating fragment of the Staphylococcus genome and/or plasmids. The methods and compositions of the present invention are useful for the diagnosis, prevention and/or treatment of an Staphylococcus proterial of the anino acid sequence of a S. epidermidis botterial of
                                                                                                                                                                               antibacterial; vaccine; antisense therapy; Staphylococcus epidermidis; recombinant expression vector; infection; computer readable medium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated polypeptide and encoding nucleic acid derived from Staphylococcus epidermidis, useful for diagnosing, preventing and/or treating an S. epidermidis bacterial infection.
                                                                                                                                        Staphylococcus epidermis polypeptide seqid 6698.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 17; SEQ ID NO 6698; 741pp; English.
                    ADS07403 standard; protein; 40 AA
                                                                                                                                                                                                                                                                                                                                                                            01-DEC-2003; 2003US-00724972.
                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0064964P.
                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-00134001.
99US-00450969.
                                                                                                                                                                                                                                                            Staphylococcus epidermidis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bush D;
                                                                                                   04-NOV-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOUCETTE-STAMM L.
                                                                                                                                                                                                                     computer based system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-580138/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Doucette-Stamm L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADS03631
                                                                                                                                                                                                                                                                                                 US2004147734-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                     13-AUG-1998;
29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                   08-NOV-1997;
                                                                                                                                                                                                                                                                                                                                     29-JUL-2004
                                                             ADS07403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ponc/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BUSH/)
```

```
This sequence represents a repeat sequence that can be used in the proteinaceous substance of the invention. The proteinaceous substance comprises at least one stretch of amino acids derived from a first comprises at least one stretch of amino acids derived from a first the proteinaceous substance is useful in a method for attaching a substance to the cell wall of a microorganism, and the substance and either microorganism are useful in pharmaceutical compositions and vaccines, for delivery of substance to a cell. They are also useful in the thought are useful in pharmaceutical compositions and vaccines, for delivery of substance to a cell. They are also useful in the prior art anchoring processes and in foodstuffs. The new method targets substances to cells of a wide range of microorganisms, unlike prior art anchoring and trageting proteins which are usually selective for a limited set of microorganisms, which are usually non-recombinant, preventing restrictions on applications, and preventing potential problems of colonisation of the mucosal surfaces which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   generates long term exposure to the target antigens expressed, which can cause immune tolerance. Public consensus is against use of recombinant or attenuated strains, so the new technique is more likely to be accepted than prior art methods
                                                                                                                                                                                               AcmA repeat; consensus sequence; major peptidoglycan hydrolase; vaccine; cell wall attachment; substance delivery; diagnosis; bioadsorption.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New proteinaceous substance comprising a sequence consensus to a major peptidoglycan (AcmA), useful for attaching a substance to a cell wall.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 YTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCIS 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17.1%; Score 47; DB 2; Length 44; ilarity 32.6%; Pred. No. 2.5e+02; Conservative 6; Mismatches 21; Indels
                                                                                                                                                       Lys repeat sequence from Lactococcus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABR83729 standard; peptide; 44 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Fig 11; 98pp; English.
                                     AAY13969 standard; peptide; 44
                                                                                                                                                                                                                                                                                                                                                                                97EP-00203539.
                                                                                                                                                                                                                                                                                                                                                                                                                       97EP-00203539.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYGR-) RIJKSUNIV GRONINGEN,
                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-290024/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 44 AA;
                                                                                                                                                                                                                                                                                                                                                                                13-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                       13-NOV-1997;
                                                                                                                  15-JUL-1999
                                                                                                                                                                                                                                                                                                   EP916726-A1
                                                                                                                                                                                                                                                                                                                                        19-MAY-1999
                                                                             AAY13969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABR83729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
ABR83729
RESULT 12
                    AAY13969
                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

3

ï

Gaps

1;

Length 40; 14; Indels

Score 48.5; DB 8; Pred. No. 1.4e+02;

Query Match
Best Local Similarity 33.3%;

12; Conservative

Matches

9; Mismatches

(first entry)

```
delivery; targeting system; AcmA-type anchor protein; solid tumour; health; medical; agricultural; cosmetic; controlled release.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vehicle for targeted delivery of therapeutic or diagnostic agents, includes protein anchor and system for inducing availability of the
                                                               AcmA-type homologue amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                     Friesen RHE, Leenhouts CJ, Hektor HJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Page 193; 303pp; English.
                                                                                                                                                                                                                                                                                                                                                      (NANO-) APPLIED NANOSYSTEMS BV
                                                                                                                                                                                                                                                                                   04-APR-2002; 2002US-0369927P.
05-APR-2002; 2002US-0370485P.
20-DEC-2002; 2002EP-00080481.
                                                                                                                                                                                                                                          04-APR-2003; 2003WO-NL000256.
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-877005/81.
                                                                                                                                                                           WO2003084508-A1.
                                                                                                                                                                                                                                                                                                                                                                                                      Robillard GT;
                                                                                                                                           Unidentified.
                                                                                                                                                                                                                                                                        04-APR-2002;
04-APR-2002;
                                 12-FEB-2004
                                                                                                                                                                                                          16-0CT-2003
 ADF70020;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAM92081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAM92081
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXXXXXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method of obtaining cell-wall material of a Gram-positive bacterium with improved capacity for binding to a Gram-positive bacterium with improved capacity for binding to a protein accoust substance (PS), or binding PS to cell-wall material of the bacterial of the bacterium, by treating the cell-wall material with a solution capable of removing a cell-wall component such as a protein, (lipo)teichoic acid or carbohydrate from the material. The method especially uses the binding of the PS with an anchor protein from the cell wall of the organism. The anchor protein is preferably the Lactococcus lactis AcmA cell wall binding domain or its homolog or functional derivative. The method is useful for improving binding of proteinaceous substance to cell wall material of gram-positive bacterium, e.g. for the preparation of a pharmaceutical composition comprising a vaccine useful for mucosal immunization and for preparing a biocatalyst. The preparation is also useful for generating bioadsorbents or biofilters for environmental purposes, incrobiocatalysts and diagnostic tools. Also for vaccination purposes, to elicit immunity for pathogens, like malaria and streptococcus pneumoniae. In an example of the invention, acid suchor fusion is investigated by the construction of a reporter plasmid anchor fusion is investigated by the construction of a reporter plasmid streptococcus pneumoniae protease maturation protein PpmA. This sequence regions in the generation of the fusion protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7
                                                           Antibacterial; protozoacide; vaccine; cell-wall material; anchor protein; dram-positive bacterium; Lactococcus lactis; Acmis, biocatalyst; mucosal immunization; bioadsorbent; biofilter; microbiocatalyst; vaccination, malaria; Streptococcus pneumoniae; fusion gene;
                                                                                                                                                                                                                                                                                                                                                                                                                  Improving binding of a proteinaceous substance e.g. an AcmA-type protein to a cell-wall material of microorganisms, comprises treating the material with a solution capable of removing protein or carbohydrate from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                      Kuipers OP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YVVKQGDTLSGIASN-WGTNWQELARQNSLSNPNM---IYAGQVIS 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 YTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCIS 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17.1%; Score 47; DB 6; Length 44; 32.6%; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21; Indels
                                                                                                                                                                                                                                                                                                                                                      Buist G,
                               Bacteriophage Tuc2009 lys protein amino acids 332-375.
                                                                                                                            Streptococcus pneumoniae; protease maturation protein.
                                                                                                                                                                                                                                                                                                                                                      Kok J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Mismatches
                                                                                                                                                                                                                                                                                                                                                    Leenhouts CJ, Ramasamy R, Steen A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADF70020 standard; protein; 44 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Fig 24; 77pp; English
                                                                                                                                                                                                                                                                                                                     (NANO-) APPLIED NANOSYSTEMS BV
                                                                                                                                                                                                                                                       11-JUN-2002; 2002WO-NL000383.
                                                                                                                                                                                                                                                                                       11-JUN-2001; 2001EP-00202239.
 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15; Conservative
                                                                                                                                                            Bacteriophage Tuc2009
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-167404/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                        WO2002101026-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 44 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the material.
 15-0CT-2003
                                                                                                                                                                                                                        19-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
ADF70020
ID ADF70
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

Heeres A;

Van Esch JH,

```
7
                                                                                                                                                                                               therapeutic agents to predetermined sites in the body, particularly joints or solid tumours but can be used more generally for health, addical agricultural and cosmetic applications. (A) significantly increases the half-life of peptides in the circulation and, by providing controlled release, ensures relatively high bioavailability, allowing therapeutic use of agents that would otherwise be too toxic for systemic administration. The native Acma peptide targets Gram-positive bacteria but its homologues can be engineered to have different selectivity. The present sequence is used in the exemplification of the present invention.
The present invention describes a vehicle (A) for delivering a substance and to a predetermined site, which comprises (1); a system for inducing availability of at least one compartment of (A) towards the exterior; and, as targeting system for directing (A) to the site, an AcmA-type anchor protein (II). (A) are used for delivery of diagnostic and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; digestive system antigen; gene therapy; cancer; appendicitis;
ulcerative colitis; infection; Hirschsprung's disease; chronic colitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 YTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCIS 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YVVKQGDTLSGIASN-WGTNWQELARQNSLSNPNM---IYAGQVIS 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 47; DB 7; Length 44; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human digestive system antigen SEQ ID NO: 1430.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM92081 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 32.6
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 44 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-NOV-2001
```

```
2000US-0235484P.
2000US-0235834P.
2000US-0235834P.
2000US-0236327P.
2000US-0236368P.
2000US-0236368P.
2000US-0236368P.
2000US-0236369P.
2000US-023639P.
2000US-023639P.
2000US-0237038P.
2000US-0237038P.
2000US-0237038P.
                                                                                                                                                                                                                                                      2000US-023937P.
2000US-0240960P.
2000US-0241721P.
2000US-0241785P.
2000US-0241786P.
2000US-0241786P.
                                                                                                                                                                                                                                                                                                                                                                          2000US-0241809P.
2000US-0241826P.
2000US-0246474P.
2000US-0246475P.
2000US-0246476P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0249217P.
2000US-0249244P.
2000US-0249244P.
2000US-0249264P.
2000US-0249265P.
2000US-024929P.
2000US-024929P.
2000US-024929P.
2000US-024929P.
2000US-024930P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
2000US-0250391P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0246478P.
2000US-0246523P.
2000US-0246524P.
2000US-0246525P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0246526P.
2000US-0246527P.
2000US-0246528P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0246609P.
2000US-0246610P.
2000US-0246611P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0246613P.
2000US-0249207P.
2000US-0249208P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0249210P.
2000US-0249211P.
2000US-0249212P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0251989P.
2000US-0251990P.
2000US-0254097P.
2001US-0259678P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0246532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0249209P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0249216P
25 - SEP - 2000; 25 - SEP - 2000; 26 - SEP - 2000; 27 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - SEP - 2000; 20 - S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-DEC-2000;
11-DEC-2000;
05-JAN-2001;
   digestive system disorder; Meckel's diverticulum
                                                                                                                                                                     2000US-0179065P.
2000US-0180628P.
2000US-0184664P.
2000US-0186350P.
2000US-0189874P.
                                                                                                                                                                                                                                                        2000US-0190076F

2000US-0190076F

2000US-0214886F

2000US-021148F

2000US-021647F

2000US-0216880F

2000US-0216880F

2000US-0216890F

2000US-0217496F

2000US-0217496F

2000US-0217496F

2000US-0218290F

2000US-022518F

2000US-022514F

2000US-022514F

2000US-022514F

2000US-022514F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F

2000US-022526F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0226279P.
2000US-0226681P.
2000US-022688P.
2000US-0227182P.
2000US-0227009P.
2000US-0228924P.
2000US-0229343P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0229513P.
2000US-0230437P.
2000US-0230438P.
2000US-0231242P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0231244P.
2000US-0231244P.
2000US-0231413P.
2000US-0231414P.
2000US-0232080P.
2000US-0232081P.
2000US-0232081P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0232400P.
2000US-0232401P.
2000US-0233063P.
2000US-0233064P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0234223P.
2000US-0234274P.
2000US-0234997P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0232397P.
2000US-0232398P.
2000US-0232399P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0229345P.
2000US-0229509P.
                                                                                                                                     17-JAN-2001; 2001WO-US001324
                                                                    WO200155314-A2
                                                                                                                                                                     31-JAN-2000)
04-FEB-2000)
16-MAR-2000)
17-MAR-2000)
18-MAR-2000)
19-MAR-2000)
19-MAR-2000)
19-MAR-2000)
19-MAR-2000)
19-MAR-2000)
19-MAR-2000)
19-MAR-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JUL-2000)
11-JU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-SEP-2000;
08-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-SEP-2000;
21-SEP-2000;
21-SEP-2000;
25-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -SEP-2000;
-SEP-2000;
-SEP-2000;
                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-SEP-2000;
                                                                                                      02-AUG-2001
```

```
HUMA-) HUMAN GENOME SCI INC.

XX
PI
Rosen CA, Barash SC, Ruben SM;
XX
WPI; 2001-502630/55.

N-PSDB; AAK87854.

XX
POlynucleotides encoding digestive system antigens, useful for diagnosing, treating, preventing and/or prognozing disorders of the diagnosing, treating, preventing and/or prognozing disorders of the diagnosing treating, preventing and/or prognozing disorders of the diagnosing treating, preventing and/or prognozing disorders of the diagnosis in the diagnosis treatment and prevention of digestive system disorders, including cancer, Meckel's diverticulum, bacterial or parasitic confictions, appendicitis, Hirschsprung's disease, chronic colitis or the invention

XX
CC diagnosis, treatment and prevention of digestive system disorders, including cancer, Meckel's diverticulum, bacterial or parasitic culcerative colitis. The present sequence is a digestive system antigen of the invention

XX
Sequence 49 AA;
Sequence 49 AA;
```

Search completed: June 29, 2005, 09:41:08 Job time : 36.5521 secs

ö

Gaps

. 0 THIS PAGE BLANK WATER

```
62
62
61
61
60.5
60.5
60.5
                                                                                                                       0909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q96D42
Q96D42;
                                                                                                                                                                                                                                                                                       043656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 2
                                                                                                                                                                                                                                                            RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           096042
11D 099
AC 099
DT 011
DT 255
DE HA
GN NG
OS HC
 043656
                                                                                                                                                                                                                                                                                                    AC GON DET THE REST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF THE PREST OF T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dengue viru
dengue viru
sulfolobus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            043656 homo sapien
Q96d42 homo sapien
Q95144 cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        escherichia
escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   anopheles g
saccharomyc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cercopithec
cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rattus norv
mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             shigella dy
rhodopirell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dengue viru
dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dengue viru
                                                                                         June 29, 2005, 08:57:16; Search time 20.8409 Seconds (without alignments) 1277.688 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dengue viru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                caenorhabdi
caenorhabdi
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                           US-10-718-321-7_COPY_249_300
275
1 PLYSYTTDGNDTVTESSDGL.....SLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q7tpu2
Q53969
Q7ukm5
Q842d0
Q9kja0
Q9kja0
Q6kp59
Q6wp59
Q6wp63
Q6wp63
Q6wp69
Q6wp69
Q6wp69
Q6wp69
Q6wp69
Q6wp69
Q6wp69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         046598
Q8vim2
O54947
Q8vim1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q8jqd9
Q9inhi
Q6wp58
Q80kc7
Q09208
Q23351
                                                                                                                                                                                                                                                                         1612378
           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                             1612378 segs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            043656
095042
095044
0108984
070348
070347
046598
080701
077702
054947
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
077701
0
                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                 - protein search, using sw model
                                                                                                                                                                                                    BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                               UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                   seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Perfect score:
                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76.5
76.5
68
67.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                 Minimum DB @
Maximum DB @
                                                                 OM protein
                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Result
                                                                                                                                               Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š.
```

```
ö
                                                                                                                         thunnus ala
erwinia amy
homo sapien
homo sapien
rhodopirell
                                                                                                                                                                                                                                                                                                     bacillus su
arabidopsis
gallus gall
ashbya goss
         human papil
                                                                                             venezuelan
                                                                                                                                                                                                                                                                         plasmodium
                                                                    fremyella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Liver;
MEDLINE-98325180; PubMed-9658108;
Feigelstock D., Thompson P., Mattoo P., Zhang Y., Kaplan G.G.;
"The human homolog of HAVcr-1 codes for a hepatitis A virus cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HAVCRI protein.
Name-HAVCR1;
Name-HAVCR1;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
   P36758 | Q9u0j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j2 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9u2j9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9uzj9 | Q9u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 275; DB 2; Length 3
Best Local Similarity 100.0%; Pred. No. 3e-25;
Matches 52; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359 AA; 38704 MW; C207FEC562DC62CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-JUN-1998 (TrEMBLrel. 26, Last annotation update)
Hepatilis A virus cellular receptor 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor.";
J. Virol. 72:6621-6628(1998).
EMBL; AF043724; AAC39862.1; -
GO; GO:0004872; F:receptor activity; IEA.
InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                              Q9H751
Q9HC44
Q7USQ0
Q7RJE4
Q5SQQ6
NRG1 CHICK
Q75CI2
VL2 HPV34
Q9U0J9
Q6GZZ6
O36287
CYC THUAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM0409; IG; 1.—
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 25-OCT-2004 (TrEMBLrel. 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE PROM N.A.
   NCBI_TaxID=9606;
```

```
1 17 Potential.
451 AA; 48774 MW; 5D395C5455AA4332 CRC64;
kidney cells as a receptor for hepatitis A virus.";
                                                                                                                                                                                                                                                            PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN_1.
                          EMBO J. 15:4282-4296 (1996).
EMBL; X98252; CAA66906.1; -.
PIR; S71754; S71754.
InterPro; IPR007110; Ig-like.
InterPro; IPR007110; Ig-like.
SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JAN-1998
01-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cell line.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07JJ48;
                                                                                                                                                                                                                                                                                                                               Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              073348
                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       018984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
018984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                073348
      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SO OR RELEASED OF THE SO OR OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR SO OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Serrings
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                    MEDINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
A Klausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,
A Klausner R.D., Colling F.S., Wagner L., Schemmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bhat N.K.,
A Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bhat N.K.,
A patchenko L., Marusina K., Farmer A.A., Rubin G.M., Hoog L.,
Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Prange C.,
Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Brownstein M.J., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HAVCT-1 protein precursor.

Cercopithecus aethiops (Green monkey) (Grivet).

Eukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;

Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-197015129; PubMed=8861957;
Kaplan G., Totsuka A., Thompson P., Akatsuka T., Moritsugu Y.,
Feinstone S.M.;
"Identification of a surface glycoprotein on African green monkey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ebert L., Schick M., Newbert P., Schatten R., Henze S., Korn B., Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.;
Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genew; HGNC:17866; HAVCRI.
InterPro; IPR0013599; Ig.
InterPro; IPR007110; Ig.
InterPro; IPR003006; Ig.MC.
SMART; SM04409; IG; 1.
PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS02209; IG MC; UNKNOWN 1.
SRQUENCE 364 AA; 39249 MW; AA67C7DC7FAC81F1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q95144;
1-FRB-1997 (TrEMBLrel. 02, Created)
01-FRB-1997 (TrEMBLrel. 02, Last sequence update)
01-FRB-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 275; DB 2;
100.0%; Pred. No. 3e-25;
ive 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; BC013325; AAH13325.1; -. EMBL; CR457114; CAG33395.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
          [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         095144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 3
095144
1D 09514
DT 001-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 01-F
DT 0
             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

```
ö
                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE-37868416;
Ashida M., Hamada C.;
"Molecular cloning of the hepatitis A virus receptor from a simian
                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis A virus receptor.

Cercopithecus aethiops (Green monkey) (Grivet).

Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;

Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      338 PLYSYTTDGSDTVTESSDGLMNNNQTQLSPEHSPQMVNTTEGIYAGVCISVL 389
                                                                                                                                              329 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQWVNTTEGIYAGVCISVL 380
                                                                                                               1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
82.9%; Score 228; DB 2; Length 451;
84.6%; Pred. No. 2.2e-19;
tive 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 82.9%; Score 228; DB 2; Length 46
Best Local Similarity 84.6%; Pred. No. 2.3e-19;
Matches 44; Conservative 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460 AA; 49687 MW; 1D1A0C1D832139EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update) Hepatitis A virus cellular receptor 1 short form. Name=FRVCr-1;
                                                                                                                                                                                                                                                                                                                                                                                       01-JAN-1998 (TrEMBLrel. 05, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cercopithecus aethiops (Green monkey) (Grivet).
                                                                                                                                                                                                                                                                                                             460 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO, GO:0004872; F:receptor activity; IEA.
InterPro; IPR003599; Ig.
InterPro; IPR00710; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J. Gen. Virol. 78:1565-1569(1997).
EMBL; D88585; BAA21556.1; -.
                                                           44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00409; IG;
```

```
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                     Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                     046597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               046598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
046598
                                         RESULT 7
                                                                               04659
                                                                                                                                                       DDT REPRENTED THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                               MEDLINE-88285791; PubMed=9621033;

MEDLINE-88285791; PubMed=9621033;

MEDLINE-89285791; PubMed=9621033;

MEDLINE-89285791; PubMed=9621033;

MEDLINE-89285791; PubMed=9621033;

The Feigle Brock D., Thompson P., Mattoo P., Kaplan G.G.;

Todymorphisms of the hepatitis A virus callular receptor 1 in African procective monocolonal antigenic variants that do not a recent with protective monocolonal antibody 190/4.";

MEMBL, AF043446; AAC39771.1;

MEMBL, AF043446; AAC39771.1;

MILE PROJET PRO03100; IG-1ike.

MILE PROJET PRO03100; IG-1ike.

MEMBL, SMART; SM00409; IG; 1.

MEMBL, SMART; SM00409; IG; 1.

MEMBL, MEMBL, MEMBL, UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=98285791; PubMed=9621093; Feigel Brock D., Thompson P., Mattoo P., Kaplan G.G.; Feigel Brock D., Thompson P., Mattoo P., Kaplan G.G.; Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4."; J. Virol. 72:618-6221(1998). EMBL, AF044448, AAC39773.1; P. EMBL, AF044448, P. E. ECCEPTOR activity, IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cercopithecus aethiops (Green monkey) (Grivet).
Bukaryota: Metaaca; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Cercopithecus.
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82.9%; Score 228; DB 2; Length 469; 84.6%; Pred. No. 2.3e-19; ive 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.9%; Score 22%; DB 2; Length 473; 84.6%; Pred. No. 2.4e-19; Live 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      469 AA; 50561 MW; 27E386F47948F528 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           473 AA; 50973 MW; CD15EF5EE79C8013 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update) Hepatitis A virus cellular receptor 1 short form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        473 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrEMBLrel. 27, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR0015; InterPro; IPR00159; InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 84.6
Matches 44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                             NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07JJ47;
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            073347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
Q7JJ47
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DDT TO OCCOOR OF THE LAND OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCOOR OCCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=98285791; PubMed=9621093;
Peigelatock D., Thompson P., Martoo P., Kaplan G.G.;
Feigelatock D., Thompson P., Martoo P., Kaplan G.G.;
Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=98285791; PubMed=9621093;
Peigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
"Polymorphisms of the hepatitis A virus cellular receptor 1 in African
green monkey kidney cells result in antigenic variants that do not
react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             352 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQWNNTTEGIYAGVCISVL 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                   Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 474;
                                                                                                                                                                                                                                                                                                Cercopithecus aethiops (Green monkey) (Grivet).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butelec
Mammalia, Butheria, Primates, Catarhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          474 AA; 51088 MW; 472DF987CA220524 CRC64;
                                                                                                                                                                     update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-1998 (TrEMBLrel. 06, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                         01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-MRA-2004 (TrEMBLrel. 26, Last annotation updat Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82.9%; Score 228; DB 2;
84.6%; Pred. No. 2.4e-19;
iive 2; Mismatches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GO, GO:0004872; P:receptor activity; IRA.
InterPro; IPR003299; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Virol. 72:6218-6222(1998).
EMBL; AF043449; AAC39774.1; -.
GO; GO:0004872; F:receptor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00409; IG; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART; SM00409; IG; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J. Virol. 72:6218-6222(1998).
EMBL; AF043447; AAC39772.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TrEMBLrel. 06, (TrEMBLrel. 06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44; Conservative
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCOCCOS ON THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE STANT OF THE ST
```

```
Biol. Chem. 273:4135-4142(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IISSUE=Prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8VIM1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8VIM1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QBVIM1
    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-Sprague-Dawley, TISSUE-Kidney;
MEDLINES-98129827; PubMed=9461608; DOI=10.1074/jbc.273.7.4135;
Ichimura T., Bonventre J.V., Bailly V., Wei H., Hession C.A.,
Cate R.L., Sanicola M.;
"Kidney injury molecule-1 (KIM-1), a putative epithelial cell adhesion molecule containing a novel immunoglobulin domain, is up-regulated in renal cells after injury."
                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN=BALB/C; TISSUE=Spleen;
MEDLINE=21582130; PubMed=11725301;
MCINCINE J.G., Umetsu S.E., Akbari O., Potter M., Kuchroo V.K.,
Barsh G.S., Freeman G.J., Umetsu D.T., DeKruyff R.H.;
"Identification of Tapr (an airway hyperreactivity regulatory locus)
and the linked Tim gene family.";
Nat. Immunol. 2:1109-1116 (2001).
EMBL, AF399829; AA135774.1; -.
                                                                                                                                                                     356 PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQWYNTTEGIYAGVCISVL 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201 SHTPTDWNGTVTSSGD-TWSNHTEA--IPPGKPQKNPTKGFYVGICIAAL 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19; Indels · 4;
                                                                                                                                           1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 SYT-IDGNDTVIESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                              Length 478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28.7%; Score 79; DB 2; Length 305; 42.0%; Pred. No. 0.27; tive 6; Mismatches 19; Indels
                                                                                                     6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO; GO:0005515; C:extracellular space; TAS.
GO; GO:0016021; C:integral to membrane; TAS.
SMART; SMO0409; IG; IL
PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 305 AA; 33391 MW; 8F4EA38627FE85FB CRC64;
                     51501 MW; 3A919655C752FF60 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                            Score 228; DB 2;
Pred. No. 2.4e-19;
                                           82.9%; Sco...
84.6%; Pred. No. 2...
2; Mismatches
                                                                                                                                                                                                                                                                                           305 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kidney injury molecule-1 (KIM-1 protein)
                                                                                                                                                                                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                              (TrEMBLrel. 20, C
(TrEMBLrel. 20, I
(TrEMBLrel. 26, I
                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21; Conservative
                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:2159680; Haverl
                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
                   478 AA;
                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 21; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                    Name=Havcr1;
                                                                                                                                                                                                                                                                                                                                01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                     01-MAR-2002
01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=KIM-1;
                                                                                                     44;
Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                054947;
                                                                                                                                                                                                                                                                                           Q8VIM2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            054947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
054947
                                                                                                     Matches
                                                                                                                                                                                                                                                RESULT 9

QBVIM2

QBVIM2

QBVIM3

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01-M

DT 01
                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
TISSUE-Protecter;

WEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RIJURE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RIJURE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heith F.,

Districtento, L., Marusina K.P., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Raha S.S., Louchman J.W., Green E.D., Dickson M.C.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Rodriguez A.C., Galmwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Jones S.J., Marra M.A.,

""Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIANE 21:582130; PubMed=11725301; McIntire J.J., Umetsu S.E., Akbari O., Potter M., Kuchroo V.K., Barsh G.S., Freeman G.J., Umetsu D.T., DeKruyff R.H.; "Identification of Tapr (an airway hyperreactivity regulatory locus)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name-Havcrl;
Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199 SYTPADWNGTVT-SSEEAWNNHTVRIPLRKP--QRNPTKGFYVGMSVAAL 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 SYT-TDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28.4%; Score 78; DB 2; Length 307; 42.0%; Pred. No. 0.36; ive 7; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 736D1DD1F1549760 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and the linked Tim gene family ";

Nat. Immunol. 2:1109-1116(2001).

EMBL; AF399830; AAL35775.1; -.

MGD; MGI:2159680; Havcri.

GO; GO:0005615; C:extracellular space; TAS.

GO; GO:0016021; C:integral to membrane; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     282 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 307 AA; 33963 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN=DBA/2; TISSUE=Spleen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2002 (TrEMBLrel. 20,
01-MAR-2002 (TrEMBLrel. 20,
01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and mouse cDNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10090;
```

. 3

549 AA.

PRT;

```
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                STRAIN-Sh16;
                       Q53969;
01-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  strain 1.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Flagellum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q7UKM5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q7UKM5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JUKW5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCOORDING THE STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDARY SO OF STANDA
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

STRAIN=C57BL/6J; TISSUE=Blastocyst;

MIDLINE=2338257; PubMed=1247932; DOI=10.1073/pnas.242603899;

MIDLINE=2338257; PubMed=1247932; DOI=10.1073/pnas.242603899;

MISCANIJ S.F., Zeeberg B.L., Grouse L.H., Derge J.G.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhate N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Bischern M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaarane P.H.,

Richards S., Worley K.C., Hale S., Garrinci P., Prange C.,

Milalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Milalon D.K., Marny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Milalon D.K., Marny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Hale S., Garrinci P.N., Bouffard G.G.,

Milting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakebley R.W., Touchman J.W., Green B.D., Dickson M.C.,

Marra M.A.,

M. Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
;
                                                                                                                                                  ;
;
                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 178 WIHKPDWNGTVTSSGD-TWSNHTEA--IPPGKPOKNPTKGFYVGICIAAL 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>ب</u>
                                                                                                                                                  ë,
                                                                                                                                                                                                    22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 YSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27.8%; Score 76.5; DB 2; Length 282; 36.0%; Pred. No. 0.5; trive 8; Mismatches 21; Indels
                                                                                                   DB 2; Length 282;
                                                                                                                                                                                                    3 YSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKGIYAGVCISVL
                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.;
Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
SMART; SM0409; IG; 1.
PROSITE; PS50835; IG LIXE; 1.
SEQUENCE 282 AA; 30968 WW; 7D30EE0698F0ACSF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS50835; IG_LIKE; 1.
Hypothetical protein.
SEQUENCE 282 AA; 30938 MW; 6D31E2778480AC5F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                 27.8%; Score 76.5; DB 2; 36.0%; Pred. No. 0.5; tive 8; Mismatches 21;
                                                                                                                                                                                                                                                                                                                                                                                 282 AA
                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6J; TISSUE=Blastocyst;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL, BC053400, AAH53400.1; -.
InterPro, IPR003599; IG.
InterPro, IPR07110; Ig-like.
SMART; SM00409; IG; 1.
                                                                                                 Query Match 27.8%
Best Local Similarity 36.0%
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 36.03
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein. Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                            Q7TPU2
                                                                                                                                                                                                                                                                                                                                                                               Q7TPU2
                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                    ð
```

RESULT 13 Q53969

```
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=1, MEDINE=22735913; PubMed=12835416; DOI=10.1073/pnas.1431443100; MEDINE=22735913; PubMed=12835416; DOI=10.1073/pnas.1431443100; Gloeckner F.O., Kube M., Bauer M., Teeling H., Lombardot T., Ludwig W., Gade D., Beck A., Borzym K., Heitmann K., Rabus R., Schlesner H., Amann R., Reinhardt R.; "Complete genome sequence of the marine planctomycete Pirellula sp.
                                                                                                                                                                                     Bacčeria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Shigella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322 SKTNAGTDTQAKLSDLMANNANAKTVITIDKGTFTANTTK--FDGVDISV 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                              Mahmoud M.A., Tominaga A., Abu Amar A.M., Enomoto M.;
Submitted (DEC-1993) to the EMBL/GenBank/DDBJ databases.
R EMBL, D26165; BAA05153.1; -.
R EMBL; P06179; 1UCU.
GO; GO:0009420; C:flagellar filament (sensu Bacteria); IEA.
GO; GO:0005199; F:structural molecule activity; IEA.
R GO; GO:0001539; P:structural molecule activity; IEA.
R GO; GO:0001539; P:structural molecule activity; IEA.
R InterPro; IPR001492; Flagellin C.
R InterPro; IPR001492; Flagellin N.
R Pfan; PF00069; Flagellin N; 1.
R PRINTS; PR00207; Flagellin N; 1.
R PRINTS; PR00207; Flagellin N; 1.
R ProDon; PD000316; Flagellin C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteria; Planctomycetes; Planctomycetacia; Planctomycetales; Planctomycetaceae; Pirellula.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24.5%; Score 67.5; DB 2; Length 460; 43.6%; Pred. No. 11; ive 5; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 SYTTDGNDTVTESSDGLWN--NNQTQLFLEHSLLTANTTKGIYAGVCISV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24.7%; Score 68; DB 2; Length 549; 42.0%; Pred. No. 12; Live 7; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-0CT-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Similar to Cap5J protein-putative transmembraneprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfan; PF04932; Wzy C; 1.
Complete proteome; Transmembrane.
SEQUENCE 460 AA; 48823 WW; CB4F7122CE5A7E1B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         549 AA; 57591 MW; 8C8A56DC661CB732 CRC64;
                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            U.S.A. 100:8298-8303(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 100:8298-8303 (EMBL; BX294150; CAD76607.1; -. GO; GO:0016021; C:integral to membrane; IEA. InterPro; IPR007016; WZy_C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460 AA
               Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-MDN-2003 (TrEMBLrel. 24, Flagellin. Name=fliC-SD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OrderedLocusNames=RB10055;
Rhodopirellula baltica.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 43.6
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                            Shigella dysenteriae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=117;
                                                                                                                                                                                                                                                  NCBI_TaxID=622;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
```

21 WNNNQTQLFLE-----HSLLT-ANTTKGIYAGVCISVL 52

ଚ

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RX DOI-LINE_22586428; PubMed=12700273;
RX DOI=L0.1128/JB.185.9.2936-2943.2003;
RX DOI=L0.1128/JB.185.9.2936-2943.2003;
RA MEDLINE=22586428; PubMed=12700273;
RA Wang L., Rothemund D., Curd H., Reeves P.R.;
RT Gene.";
RT Gene.";
RI J. Bacteriol. 185:2936-2943(2003).
REBL; AY250001; AAP13309-1; ---
DR HSSP; P06179; 1UCU.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR GO; GO:0005199; F:structural molecule activity; IEA.
DR GO; GO:0005199; F:structural molecule activity; IEA.
DR GO; GO:0005199; F:structural molecule activity; IEA.
DR HORENCO (Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
DR Pfam; PF00700; Flagellin C.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0842D0;
01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 25, Last annotation update)
11-OCT-2003 (TrEMBLrel. 25, Last annotation update)
11-OCT-2003 (TrEMBLrel. 25, Last annotation update)
12-OCT-2003 (TrEMBLrel. 25, Last annotation update)
13-OCT-2003 (TrEMBLrel. 25, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24, Last annotation update)
13-OCT-2003 (TrEMBLrel. 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327 SKTNAGTDTQAKLSDLMANNANAKTVITTDKGTFTANTTK--FDGVDISV 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 SYTTDGNDTVTESSDGLWN--NNQTQLFLEHSLLTANTTKGIYAGVCISV 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 23.6%; Score 65; DB 2; Length 554; Best Local Similarity 42.0%; Pred. No. 28; Matches 21; Conservative 6; Mismatches 19; Indels
346 WGLNSAPLLLEDFSYHTHNLLLHAIFSAGIFAGICVSVL 384
                                                                                                                                                                                                                                                                                                                                                                                                554 AA
                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [1] TSEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                         Q842D0
                                                                                                                                                                                                                                                    RESULT 15
1084200
10 04200
10 04200
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 01-JU
10 
                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

Search completed: June 29, 2005, 09:01:46 Job time: 21.8409 secs

```
5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2005
```

- protein search, using sw model OM protein

June 29, 2005, 08:57:16 ; Search time 57.6071-Seconds (without alignments) 543.815 Million cell updates/sec Run on:

US-10-718-321-6

Title: Perfect score:

1 MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG Sequence:

81

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2105692 segs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

length: 0 length: 2000000000 DB seq DB seq Minimum E Maximum E

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqp2000s:* geneseqp2001s:* geneseqp2002s:* geneseqp2003as:* geneseqp2003bs:* A_Geneseq_16Dec04:* geneseqp1980s:* geneseqp1990s:* geneseqp20048;* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

					SUMMARIES		
		مد					
Regult No.	Score	Match	Query Match Length	DB	ID	Description	
1	432	100.0	81	9	AA026678	Aao26678 Human KIM	
7	432	100.0	298	œ	ADQ76693	Adq76693 Human KIM	
	432	100.0	334	~	AAW38336	Aaw38336 Human kid	
4	432	100.0	334	9	AA026679		
S	432	100.0	334	œ	ADQ76696	Adq76696 Human kid	
9	432	100.0	339	7	ADE36618	Ade36618 Plasmid p	
7	432	100.0	339	7	ADE36592	Ade36592 Human NOV	
60	432	100.0	359	9	ABR58582	Abr58582 Human can	
0	432	100.0	359	9	ABP70439	Abp70439 Amino aci	
10	432	100.0	359	9	ABP70438	Abp70438 Amino aci	
11	432	100.0	359	9	ABR48174	Abr48174 Human bla	
12	432	100.0	359	9	AA026680	Aao26680 KIM-1 rel	
13	432	100.0	359	7	ADE36594	Ade36594 Human NOV	
14	432	100.0	359	7	ADN38984	Adn38984 Cancer/an	
15	432	100.0	359	æ	ADQ76690	Adq76690 Human kid	
16	432	100.0	364	છ	ABP70442	Abp70442 Amino aci	
17	432	100.0	365	9	ABP70440		
18	432	100.0	518	ω	ADQ76691	Adq76691 Human KIM	
19	427	98.8	364	9	ABP70443	m	
20	423	97.9	359	9	ABP70441	Abp70441 Amino aci	
21	396	91.7	263	7	ADE36629	σ.	
22	396	91.7	263	7	ADE36622	Ade36622 Plasmid p	
23	396	91.7	263	7	ADE36596	Ade36596 Human NOV	
24	348	90.6	451	~	AAR92803	Aar92803 Hepatitis	
25	101	23.4	18	9	AA026686	Aao26686 Human KIM	

Aao26687 Human KIM Aao26673 Monoclona Aao26681 Human KIM	Aao26682 Human KIM Aao26683 Human KIM Aao26685 Human KIM	Aao26684 Human KIM Aao26688 Human KIM		Abb93650 Herbicida Abp70431 Amino aci		Adk40920 Novel hum Adr15641 Kinase 42	Aae35499 Streptomy Abb78670 N. gonorr	5 Ar
AAO26687 AAO26673 AAO26681	AAO26682 AAO26683 AAO26685	AAO26684 AAO26688 AAW38334	AAB42784 ABP69679	ABB93650 ABP70431	AAB42121 AAY53000	ADK40920 ADR15641	AAE35499 ABP78670	AAG19395
9 9 9	999	996	4 m m	0 2	ოო	r 8	99	m
18 18 18	138	18	153	681 282	447 647	893 893	8360 539	219
22.9 22.9 22.7	22.5 22.5	21.3	2002	18.3	17.6 17.6	17.6	17.4	16.8
0 6 6 0 8	94 96 95	9 6 8	888	76.5	76 76	76 76	75	72.5
26 27 28	30 31	332	3 3 3	37	39 40	4 42 42	4 4 4	45

ALIGNMENTS

Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; human. Human KIM-1 mucin domain protein, SEQ ID No 6. AAO26678 standard; protein; 81 AA 31-MAY-2002; 2002WO-US017402. 01-JUN-2001; 2001US-0295449P. 04-JUN-2001; 2001US-0295907P. (BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP. (first entry) Bailly V, Bonventre J; WO200298920-A1. Homo sapiens. 20-MAR-2003 12-DEC-2002. AA026678;

WPI; 2003-156845/15.

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer

Disclosure, Fig 1A; 42pp, English.

The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain protein of the invention

S

원

ð

```
include a KIM-1 mucin domain in addition to the KIM Ig domain, and may include a heterologous moiety such as an Fc moiety. The antagonist may be conjugated to a polymer such as polyethylene glycol. The KIM-1 antagonist is used in methods of: inhibiting activation of a B cell in a mammal; inhibiting disease relapse in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; treating a Th2 cell-mediated disease (e.g. myasthenia gravis, autoimmune haemolytic anaemia, Chagas disease, Grave's disease, idiopathic thrombocytopenia purpura, Wegener's granulomatosis, polyarteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of IFN-gamma by lymphocytes.
                                                                                                                                                                                                                                                                                                                                                                                Sequence 298 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW38336;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cate RL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW38336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                  859999999999888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is that of a polypeptide comprising the extracellular domain (residues 1-290) of human Kidney injury molecule-1 (KIM-1) AD076690 fused to a C-terminal 6xHis tag peptide. A plasmid comprising DNA encoding this sequence under control of a CMV promoter was used for transient constitutive expression of the polypeptide in mammalian cells in an example from the invention. The invention provides methods for therapeutically modulating immune function in autoimmune
                                                                                                                                                                          9
                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                                                                                                                        1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                    Gaps
                                                                                                                         ö
                                                                100.0%; Score 432; DB 6; Length 81; 100.0%; Pred. No. 1.7e-36;
                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human KIM-1 extracellular domain-6xHis fusion.
                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .20
/label= Signal_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADQ76693 standard; protein; 298 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; Page 33; 68pp; English.
                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                         NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                               61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                       81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-534277/51.
                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004060041-A2
                  Sequence 81 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rennert PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                              61
                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
ADQ76693
```

```
This protein, designated kidney injury related molecule (KIM), is upregulated in injured or regenerating tissue. Its amino acid sequence was deduced from a clone (see AAT96035) obtained from a human embryonic liver library, A 572-amino acid (see AAM38335) and a 307-amino acid rat KIM (see AAM38334) are also claimed. Recombinant KIM polypeptides can be expressed in prokaryotic and eukaryotic host cells using a claimed process. Soluble variants fused to a toxin, imageable compound or
                                 ö
                                                                                     110 MPLPRQNHEPVAISPSSPQPAETHPTTLQGAIRREPTSSPLYSSYTTDGNDTVTESSDGLW 269
                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA encoding kidney injury related molecule - which is upregulated in injured or rejenerating tissue, useful to promote growth of new tissue and survival of damaged tissue.
                                                                 1 MPLPRONHEPVATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                       Kidney injury related molecule; KIM; human; renal disease; injury; nephritis; tissue regeneration; therapy; monoclonal antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wei
                                 .
0
 DB 8; Length 298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ichimura T,
                               Indels
100.0%; Score 432; DB 8;
100.0%; Pred. No. 8.1e-36;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sanicola-Nadel M, Bonventre JV, Hession CA,
                                                                                                                                                                                                                                                                                                                                             Human kidney injury related molecule (KIM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 9; Page 46-47; 68pp; English.
                                                                                                                                                                                                                                              AAW38336 standard; protein; 334 AA
                                                                                                                                                            270 NNNOTOLFLEHSLLTANTTKG 290
                                                                                                                               81
                                                                                                                                 NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97WO-US009303.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-0018228P.
96US-0023442P.
                                                                                                                                                                                                                                                                                                              (first entry)
               Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-018514/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC.
                                                                                                                                                                                                                                                                                                              21-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9744460-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and
```

diseases and other disorders of the mammalian immune system. A method is claimed for inhibiting signalling between a T cell and a second cell, e.g. an antigen-presenting cell, in a mammal. The method involves identifying a mammal with an immune disease or disorder, or one preparing to receive a tissue graft, and administering a KIM-1 antagonist, especially a polypeptide comprising: a KIM-1 Ig domain, and lacking a transmembrane domain and a KIM-1 cytoplasmic domain, an anti-KIM-1 antibody, or an antigen-binding fragment of an anti-KIM-1 antibody. Preferably, the KIM-1 antagonist is a soluble polypeptide, which can

-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1 protein of the invention

ö

Gaps .. 0

Length 334; Indels

100.0%; Score 432; DB 6; 100.0%; Pred. No. 9.3e-36; iive 0; Mismatches 0;

81; Conservative

Similarity

Query Match Best Local S

Matches

ð 셤 8 ద

Sequence 334 AA;

8888888888888

269

1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW

270 NNNOTOLFLEHSLLTANTTKG 290

61 NNNQTQLFLEHSLLTANTTKG 81

ADQ76696 standard; protein; 334 AA

ADQ76696

RESULT

09

```
cradionuclide, and IgG fusion proteins are also claimed. KIM, or an agonist, can used to treat renal disease and to promote the growth of new tissue or the survival of damaged tissue, generally in conditions where the binding of specific ligand to KIM stimulates cell growth, maintains cellular differentiation or reduces apoptosis, e.g. in cases of renal callular differentiation or reduces apoptosis, e.g. in cases of renal callular differentiation or reduces apoptosis, e.g. in cases of renal callular intibody specific for KIM can be used to treat renal disease, e.g. where binding of KIM to ligand results in neoplasia, loss of cellular function, susceptibility to apoptosis or promotion of inflammation, deliver imaging agents to KIM expressing cells in vivo or in vitro and measure KIM concentration by immunoassay.

Con in vitro and measure KIM concentration by immunoassay.

Con in vitro and measure calls can be determined by measuring KIM, particularly to diagnose or monitor the progress of disease or therapy.

Construction comprising KIM ligand or Mab with a toxin or radionuclide, and tumour cells that express KIM ligand can be inhibited with similarly can anti-KIM ligand antibody
                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                           1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; human.
                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                        Length 334;
                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 432; DB 2;
100.0%; Pred. No. 9.3e-36;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KIM-1 related protein, SEQ ID No 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAO26679 standard; protein; 334 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NNNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                        81; Conservative
                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                      Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200298920-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA026679;
                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                           ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

Human kidney injury molecule-1 (KIM-1).

(first entry)

16-DEC-2004

ADQ76696;

```
"C-terminal region unique to this splice variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.
                                                                          Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                                                                                                                                                                                             /note= "Transmembrane domain"
324. .334
/note= "C-terminal region unio
                                                                                                                                                                                                                                      'note= "N-glycosylated"
                                                                                                                                                                                          "N-glycosylated"
                                                                                                                                                                                                                 'note= "N-glycosylated"
                                                                                                                                                          l. .20
/label= Signal_peptide
55. .67
                                                                                                                                                                                                                                                            'note= "N-glycosylated"
                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                          29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                                                                                                                                                                                30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                      BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                     258. .260
                                                                                                                                                                                                                           . .274
                                                                                                                                                                                                                                                 286. .288
                                                                                                                                                                                                                                                                      290. .311
                                                                                                                                                                                          'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-534277/51.
                                                                                                                                                                                                                                                                                                                               WO2004060041-A2
                                                                                                                                                                                Modified-site
                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                 Modified-site
                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                     22-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                            Rennert PD;
                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                        Domain
                                                                                                                                                                                                                                                                                               Region
```

The invention relates to a novel antibody, antibody derivative or antigen

Disclosure; Page 39-40; 42pp; English.

e.g. renal cancer

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,

01-JUN-2001; 2001US-0295449P. 31-MAY-2002; 2002WO-US017402

12-DEC-2002.

(BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP.

Bailly V, Bonventre J; WPI; 2003-156845/15

```
The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobilin (Ig) and mucin domain (TIM) family. This protein has 334 amino acids or 359 amino acids ADQ76690, depending on splice variation. It has been a discovered that treatment of a mammal with a KIM-1 antagonist alters the interaction of T cells and other immune System cells, e.g. dendritic cells, monocytes, macrophages and B cells and thereby strongly suppresses an IgG response to an antigen. Such treatment also eliminates 1gdl production by memory B cells in response to subsequent challenge cells, monocytes, macrophages of the binding of KIM-1 to its receptor reduces secretion of interferor—gamma by immune cells engaged in an autigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention in autoimmune diseases and other disorders of antigen response in the mixed lymphocyte response assay. Based on these cantigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention in autoimmune diseases and other disorders of colls. The mammalian immune system. A method is claimed for inhibiting mammalian immune system. A method is claimed for inhibiting calling between a T cell and a second cell, e.g. an antigen-presenting signalling between a T cell and a second cell, e.g. an antigen-binding coll, in a mammal. The method involves identifying a mammal with an and administering a KIM-1 antibody. Preferably, the KIM-1 antibody, or an antigen-binding fragment of an anti-KIM-1 antibody, or an antigen-binding fragment of an anti-KIM-1 antibody, or an antigen-binding collubs polypeptica, which can include a KIM-1 methods, which an include a kiM-1 antibody, or an antigen-binding collubs polypeptical purple, and may include a heterologous moiety such as an FC collubs polypeptical purple of a B cell in a mammal; inhibiting activation of a B cell in a mammal inhibiting activation of a B cell in a mammal inhibiting activatio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         210 MPLPRQNHEPVAISPSSPQPAETHPTTLQGAIRREPISSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MPLPRONHEDVATSPSSPQPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human, NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plasmid pCR2.1-CG57008-03-S843 15B protein insert SEQ ID NO:28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 432; DB 8; Length 334; 100.0%; Pred. No. 9.3e-36; ive 0; Mismatches 0; Indels C
                        Disclosure; SEQ ID NO 1; 68pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270 NNNOTOLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE36618 standard; protein; 339 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NNNOTOLFLEHSLLTANTIKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity luv...
Best Act 81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IFN-gamma by lymphocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE36618;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE36618

ID ADE3

XX AC ADE3

XX DT 29-J

XX XY BUMB

XX W HUMB

XX W FOND

XX YOUR

XX FW FOND

XX POWC

XX SYRT

PN WO2(
쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
ö
                                                                                                                                                                                                                                New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249
                                                                                                                                                                                                                                                                                                                      The present invention describes an isolated human NOVX polypeptide, where X is la to 1d or 2a to 2h, or its mature form, a sequence that is at least 95 $ identical to it, or a sequence comprising one or more conservative substitutions in the amino add sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents a pCR2.1-CG57008-03-S843 158 protein insert, which is used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        190 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                         Mesri M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 339;
                                                                                                                                        Rastelli L, Smithson G,
Giot L, Starling G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 432; DB 7;
100.0%; Pred. No. 9.5e-36;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal cancer; inflammation; tissue typing
                                                                                                                                                                                                                                                                                              Example 1; SEQ ID NO 28; 239pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE36592 standard; protein; 339 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     250 NNNQTQLFLEHSLLTANTTKG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NOV1a protein SEQ ID NO:2.
                                                                                                                                         Tse K,
                                                                                                                                                        Gno X,
                              19-MAR-2003; 2003WO-US008490.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                            19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-2003; 2003WO-US008490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.v
                                                                                                                                        Lepley DM, Rieger DK,
                                                                                                                                                      Anderson DW,
                                                                                                           (CURA-) CURAGEN CORP
                                                                                                                                                                                    WPI; 2003-876927/81.
                                                                                                                                                                                                      N-PSDB; ADE36617.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 339 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003080856-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-OCT-2003.
02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE36592;
                                                                                                                                                      Ooi CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE36592
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

(CURA-) CURAGEN CORP.

WO2003080856-A2 Homo sapiens.

```
ö
                                                                                                                                                                                     New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MPLPRQNHEPVATSPSSSPQPAETHPTTLQCAIRREPTSSPLYSYTTDGNDTVTESSDGLW 249
                                                                                                                                                                                                                                                                                                                                                              present invention describes an isolated human NOVX polypeptide, where
                                                                                                                                                                                                                                                                                                                                                                             X is la to 1 or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. represents human NOVIa from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MPLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; cancer; diagnosis; screening; modulator; leukaemia; ischaemia; heart disease; atherosclerosis; endometriosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                               Mesri M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wilson KE;
                         Rastelli L, Smithson G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 432; DB 7;
100.0%; Pred. No. 9.5e-36;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human cancer related protein SEQ ID NO:239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KC, Hevezi PA,
                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 2; 239pp; English.
                                                      Giot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABR58582 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                            Tse K,
Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2001; 2001US-0323469P.
20-SEP-2001; 2001US-03238B7P.
13-NOV-2001; 2001US-0350668P.
08-PEB-2002; 2002US-0355145P.
08-PEB-2002; 2002US-0355257P.
12-APR-2002; 2002US-0375246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2002; 2002WO-US029560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aziz N, Gish
                       4, Rieger DK,
Anderson DW,
                                                                                                       WPI; 2003-876927/81.
N-PSDB; ADE36591.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-354600/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 339 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003025138-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2003
                            줊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABR58582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                            Lepley Doi CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Afar D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
ABR5 8282
AX
AC ABR5
XX
AC ABR5
XX
DT 09-4
XX
DY 09-4
XX
XW Hum
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
XX
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
COS HOU
C
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
ABRS521 to ABRS6709. Also described: (1) determining the proteins given in ABRS5521 to ABRS6709. Also described: (1) determining the presence or absence of a pathological call in a patient; (2) an expression vector comprising a nucleic acid molecule described above; (3) a host cell comprising the vector; (4) an isolated polypeptide, which is encoded by the uncleic acid; (5) an antibody that specifically binds the polypeptide of (4); (6) specifically targeting a compound to a pathological cell in a patient by administering to the patient the antibody above; and (7) a patient by administering to the patient the antibody above; and (7) a carginal servening assay. The nucleic acid is useful for diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow, bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary, charces, prostate, skin and uterus), wounds, ischaemia, heart diseases, atherosclerosis and endometriosis. The nucleic acid is also useful in drug screening, particularly for identifying agents for treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes an isolated nucleic acid molecule, which comprises the sequence of any of the genes that are up-regulated or down-regulated in specific cancers (e.g. about 1031 genes up-regulated in acute lymphocytic leukemia). ACC72641 to ACC72860 represent cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                     New genes that are up-regulated or down-regulated in cancers, useful a
markers for diagnosing e.g. cancer, ischemia or heart diseases, or as
therapeutic targets for screening drugs for treating these diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T cell immunoglobulin domain; mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freeman GJ, Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 100.0%; Score 432; DB 6; Length 359; Similarity 100.0%; Pred. No. 1e-35; 81; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcintire JJ, Dekruyff RH, Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STRD ) UNIV LELAND STANFORD JUNIOR
                                                                                                                            Claim 12; Page 742; 767pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABP70439 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-2002; 2002WO-US020890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                     New genes that are
markers for diagnos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
N-PSDB; ACC72709.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABP70439;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP70439
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X4X7X9X8X8X8X8X8X8X8X8X
```

2003-210268/20

```
domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated within immune dysfunction, including asthma. The TIM genetically associated within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM preferentially express TIM-3, while Th2 cells preferentiation. Th1 cells preferentially express TIM-1. TIM polypeptides and polymucleotides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                              New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                      present sequence is a human T cell immunoglobulin domain and mucin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   210 MPLFRQNHEBVATSPSSPQFAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T cell immunoglobulin domain; mucin domain; TIM: TIM-1; TIM-2; TIM-3; TIM-4; immune dysfunction; chromosome 5; malignancy; allergy; eczema; myelodysplastic syndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kuchroo
                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 432; DB 6; Length 359; 100.0%; Pred. No. 1e-35; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freeman GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcintire JJ, Dekruyff RH, Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRD ) UNIV LELAND STANFORD JUNIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                         Claim 10; Page 82; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABP70438 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-2002; 2002WO-US020890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JUN-2001; 2001US-0302344P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-210268/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ABZ68332.
WPI; 2003-210268/
N-PSDB; ABZ68333.
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003002722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABP70438;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
```

New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma,

```
ö
                                                           The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM protections, which critically regulate CD4 T cell differentiation. This cells preferentially express TIM-1. TIM polypeptides and polymocleonides are useful for treating cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting a bladder cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with bladder cancer-associated polynucleotide or antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                          210 MPLPRQNHEPVATSPSSPQPAETHPTTLGGAIRREPTSSPLYSYTTDGNDIVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                        1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human bladder cancer associated protein sequence SEQ ID NO:64.
                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 432; DB 6; Length 359; 100.0%; Pred. No. 1e-35; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; bladder cancer; cytostatic; gene therapy; vaccine
                                                                                                                                                                                                                                                                                        asthma, allergies, eczema or autoimmune diseases
allergy, eczema or autoimmune disease.
                                 Claim 10; Page 80-81; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABR48174 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 10; Page 252; 307pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              270 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-JUL-2002; 2002WO-US021338.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JUL-2001; 2001US-0302814P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-AUG-2001; 2001US-0310099P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-0350666P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                         81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-201532/19.
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mack DH, Aziz N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ACC50985
                                                                                                                                                                                                                                                                                                                        Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003003906-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L3-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABR48174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABR481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
The present invention describes a method for detecting a bladder cancer-
associated transcript in a cell from a patient. The method comprises
contacting a biological sample from the patient with a polynucleotide
that selectively hybridises to a sequence that is 80 % identical to a
table of sequences (see ACC50951 to ACC51059). ACC50951 to ACC51059
encode the human bladder cancer-associated proteins given in ABR48146 to
ABR48242). Bladder cancer-associated sequences from the present invention
have cytostatic activities, and can be used in antisense gene therapy and
in vaccine production. The method can be used for detecting a bladder
cancer-associated transcript in a cell from a patient. The method is
useful in diagnosing or treating bladder cancer and in screening for
compounds that modulate bladder cancer, such as hormones or antibodies.
The nucleic acid molecules from the present invention may be used in
various screening and diagnostic methods, and for gene therapy, vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and/or antisense/inhibition applications
      $$$$$$$$$$$$$$$$$$$$$$$$
```

Sequence 359 AA;

```
ö
                                                                                          210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                         1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                           Gaps
                                         ö
        100.0%; Score 432; DB 6; Length 359;
100.0%; Pred. No. 1e-35;
ive 0; Mismatches 0; Indels
                                                                                                                                                       270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                       81
                                                                                                                                     NNNOTOLFLEHSLLTANTTKG
Query Match
Best Local Similarity 100.0
Matches 81; Conservative
                                                                                                                                     61
                                                                                                     셤
                                                                                                                                                                 셤
                                                                       ሯ
                                                                                                                                     ò
```

AAO26680 standard; protein; 359 AA AAO26680; RESULT 12

20-MAR-2003

KIM-1 related protein, SEQ ID No 8.

Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release; inhibitor; kidney injury molecule-1, KIM-1, renal disease; injury, renal cancer; human.

Homo sapiens

WO200298920-A1

12-DEC-2002.

31-MAY-2002; 2002WO-US017402

01-JUN-2001; 2001US-0295449P.

(BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP.

Bonventre J; Bailly V,

WPI; 2003-156845/15

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, renal cancer. e.9

Disclosure; Page 40-41; 42pp; English.

The invention relates to a novel antibody, antibody derivative or antigen -binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells.

100.0%; Score 432; DB 7; Length 359;

Sequence 359 AA;

Query Match

```
ô
                                                                                                                                                                                                               210 MPLPRQNHEDVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes an isolated human NOVX polypeptide, where X is la to 1d or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents human NOV1b from the present invention.
The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1 protein of the invention
                                                                                                                                                                                              1 MPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mesri M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human, NOVX, cytostatic, antiinflammatory, gene therapy, vaccine, renal cancer, inflammation; tissue typing.
                                                                                                                                                                ö
                                                                                                                                6; Length 359;
                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rastelli L, Smithson G,
Giot L, Starling G;
                                                                                                                                                                ö
                                                                                                                                Score 432; DB 6,
Pred. No. 1e-35;
                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 4; 239pp; English.
                                                                                                                                                                                                                                                                                                                                                                            A
                                                                                                                                                                                                                                                                                270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human NOV1b protein SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                            ADE36594 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tse K,
Guo X, (
                                                                                                                                                                                                                                                             61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-MAR-2003; 2003WO-US008490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAR-2002; 2002US-0365491P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-SEP-2002; 2002US-0410618P
                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       M, Rieger DK,
Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003-876927/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; ADE36593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003080856-A2.
                                                                                                Sequence 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ğ,
                                                                                                                                                                                                                                                                                                                                                                                                           ADE36594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lepley DM
Ooi CE,
                                                                                                                                                                                                                                                                                                                                            RESULT 13
                                                                                                                                                                                                                                                                                                                                                            ADE36594
 8888888
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                           ò
```

```
ADQ76690;
                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Region
                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                               RESULT 15
                                                                                                                                                                                                                                                                                                                         ADQ76690
                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                               ద
                   ö
                                               210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                     9
                                                                                                                                                                                                                        Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal neovascularistaion syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to nucleic acids and proteins (ADN38683-ADN40064) whose expression is upregulated or downregulated in specific cancers or
                                    1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hevezi PA;
                   ..
                                                                                                                                                                                                       Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:302
Pred. No. 1e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glynne R,
E, Zlotnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gish KC, Gl
Wilson KE,
    100.0%; Pred. wc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 12; SEQ ID NO 302; 1385pp; English.
                                                                                       270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                            ADN38984 standard; protein; 359 AA
                                                                           NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ginsburg WM,
R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                         21-NOV-2001; 2001US-0332464P.
29-NOV-2001; 2001US-0334393P.
03-DEC-2001; 2001US-0335394P.
14-DEC-2001; 2001US-0340376P.
08-JAN-2002; 2002US-0347211P.
10-JAN-2002; 2002US-034731P.
08-FEB-2002; 2002US-0347349P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12.ARR.2002; 2002US-0372246P.
05.UN-2002; 2002US-0386614P.
16.ULL-2002; 2002US-0396839P.
22.-ULL-2002; 2002US-0397775P.
22.-ULL-2002; 2002US-0397845P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-FEB-2002; 2002US-0356714F.
20-FEB-2002; 2002US-0359077F.
29-MAR-2002; 2002US-036809F.
64-APR-2002; 2002US-0370110F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                              13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2002; 2002US-0409450P
                                                                                                                                                                                   17-JUN-2004 (first entry)
                  81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aziz N, Gi
Murray R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-468649/44.
N-PSDB; ADN38983.
         Best Local Similarity
                                                                                                                                                                                                                                                                                                                         WO2003042661-A2
                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                            22-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Α,
H,
                                                                            61
                                                                                                                                                                ADN38984;
                                                                                                                         Afar
                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mack
                                                      셤
                                                                            8
                                                                                            g
                                     à
```

```
of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention also relates to expression vectors and host cells comprising a nucleic acid of the invention. The invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as positasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal neconscularistation syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         210 MPLPRQNHEPVAISPSSPQPAETHPTTLQGAIRREPISSPLYSSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "C-terminal region unique to this splice variant"
other diseases such as angiogenic or fibrotic disorders, and to methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 432; DB 7; Length 359; 100.0%; Pred. No. 1e-35; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Transmembrane domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/label= Signal_peptide
65. .67
/note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258. .260
'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human kidney injury molecule-1 (KIM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ76690 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-DEC-2003; 2003WO-US041294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272. .274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
Les 81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004060041-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JUL-2004
```

Rennert PD;

WPI; 2004-534277/51.

Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.

Disclosure; SEQ ID NO 1; 68pp; English.

The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (IUM) family. This protein has 334 amino acids and meuton domain (TIM) family. This protein has 334 amino acids depending on spile variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the interaction of T cells and other immune system cells, e.g. dendritic clars, macrophages and B cells, and thereby strongly strongly suppresses an IGG response to an antigen. Such treatment also eliminates (IGM) production by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor antigen response in the mixed lymphocyte response assy. Based on these classonses in the mixed lymphocyte response and other disorders of the mammalian immune system. A method is claimed for inhibiting coldulating information provides methods for therapeutically coldulating between a T cell and a second cell, e.g. an antigen-presenting signal information is a second cell, e.g. an antigen-presenting signal information in autoimmune diseases and other disorders, or one preparing to receive a tissue graft, and administering a KIM-1 antagonist, sepecially a polypeptide comprising a KIM-1 antagonist, sepecially a polypeptide comprising a KIM-1 antagonist, sepecially a polypeptide of an anti-KIM-1 antibody. Preferologous moiety such as an FC moiety. The antagonist may be conjugated to a polymer such as an FC moiety. The antagonist may be conjugated to a polymer such as an FC moiety. The antagonist may be conjugated to a polymer such as an elapse in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope idiopathic thrombocytopenia purpura, Wegener's granulomatosis, polyarteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of IFN-gamma by lymphocytes.

Sequence 359 AA;

Gaps ö 100.0%; Score 432; DB 8; Length 359; 100.0%; Pred. No. 1e-35; tive 0; Mismatches 0; Indels (81; Conservative Best Local Similarity Query Match Matches

1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60

g ò

ઠે

Search completed: June 29, 2005, 09:09:06 Job time : 59.6071 secs

THIS PAGE BLANK USPO

Wed

```
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                           17.6
17.6
17.5
17.5
17.5
16.9
16.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                         75.5
75.5
75
73
73
73
                                                                                                                                                                                                                                                             78.5
78.5
77.5
                                                                                                                                                                                                                                                                                                                                                           76.5
76.5
76
76
76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Si
Matches 81;
                                                                                                                                                                                                                                                                                                                           77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 302, App
Sequence 64, Appl
Sequence 4, Appli
Sequence 17, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Appli
Appli
Appli
Appli
Appli
                                                                                         June 29, 2005, 08:58:20 ; Search time 50.7642 Seconds (without alignments) 613.589 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17,
Sequence 19,
Sequence 302,
Sequence 64,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, 1
Sequence 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6
Sequence 7
Sequence 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                            432
1 MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/DSO8_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.ppp:*
| Cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.ppp:*
                                                                                                                                                                                                                                                                                                            1717557
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-718-321-6
US-10-655-506-7
US-10-118-321-7
US-10-391-939A-28
US-10-198-012-17
US-10-198-012-19
US-10-295-027-302
US-10-198-832-64
US-10-391-939A-4
US-10-663-497-17
                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                          1717557 seqs, 384547976 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                            Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         n
                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117
117
118
118
119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                             US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Published
                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0
                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
```

```
, Appl
11, Appl
11, Appl
27, Appl
27, Appl
23, Appl
23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 23, Appl
2000 24, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Appl
2000 25, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 27, Appl
Sequence 195579,
Sequence 331823,
Sequence 189741,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            157601,
3, Appli
3, Appli
6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   34, Appl
250789,
151894,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             778, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                               Sequence
US-10-663-497-19
US-10-718-321-8
US-10-188-012-25
US-10-663-497-25
US-10-663-497-21
US-10-663-497-21
US-10-188-012-21
US-10-188-012-21
US-10-188-012-21
US-10-188-012-21
US-10-188-012-23
US-10-188-012-23
US-10-391-939A-32
US-10-391-939A-32
US-10-391-939A-32
US-10-391-939A-32
US-10-663-497-23
US-10-731-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
US-10-732-923-6588
   1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
10
```

Sequence:

Run on:

Searched:

Database

ALIGNMENTS

Gaps ö ch 100.0%; Score 432; DB 17; Length 81; Similarity 100.0%; Pred. No. 1.4e-36; 81; Conservative 0; Mismatches 0; Indels Sequence 6, Application US/10718321
; Sequence 6, Application US/10718321
; Publication No. US20050112117A1
; GENERAL INFORMATION:
; APPLICANT: Bailly, Veronique
; APPLICANT: Bailly, Veronique
; APPLICANT: Bailly, Veronique
; APPLICANT: Banventre, Joseph
; APPLICANT: Benventre, Joseph
; APPLICANT: The General Hospital Corporation
; TITLE OF INVENTION: Molecules and Methods for Inhibiting
; TITLE OF INVENTION: Molecules and Methods for Inhibiting
; TITLE OF INVENTION: Molecules and Methods for Inhibiting
; TITLE OF INVENTION: Molecules and Methods for Inhibiting
; FILE REFERENCE: A124 US
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/295907
; PRIOR APPLICATION NUMBER: 60/295907
; PRIOR PILING DATE: 2001-06-04
; PRIOR PILING DATE: 2001-06-04
; PRIOR FILING DATE: 2001-06-04
; PRIOR FILING DATE: 2001-06-04
; PRIOR FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04
; ROOF FILING DATE: 2001-06-04

> Š. Result

1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW

ö

```
US-10-718-321-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
1 MPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 432; DB 17; Length 334; 100.0%; Pred. No. 7.6e-36; ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                          TITLE OF INVENTION:

TORRESPONDENCE

Catherine A. Hession
Takaharu Ichimura
Henry Wei
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TISSUB REGENERATION
NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:
ADDRESSE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 02142

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IDM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/655,506
FILING DATE: 04-Sep-2003
CLASSIFICATION: <UNKnown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/197,970
FILING DATE: 23-Nov-1998
APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-MAY-1996
ATTORNEY/AGENT INFORMATION:
NAME: Legile M.
REGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: 35,245
TELEPHONE: (617) 679-2810
TELEPHONE: (617) 679-2810
TELEPHONE: (617) 679-2818
INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-655-506-7
                                                                                                                                                                              Sequence 7, Application US/10655506
Publication No. US20050089868A1
GENERAL INFORMATION:
APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NNNQTQLFLEHSLLTANTTKG 81
                                                                              61 NNNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 334 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-10-718-321-7
; Sequence 7, Application US/10718321
                                        61 NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 81; Conserva
                                                                                                                                                               US-10-655-506-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   270
셤
                                      à
                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
```

```
APPLICANT: Smithson, Glennda;
APPLICANT: Smithson, Glennda;
APPLICANT: Starling, Gary;
APPLICANT: Tee, Kam-Fai
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODE FILE REPRENCE: 21402-048
CURRENT APPLICATION NUMBER: US/10/391,939A
CURRENT APPLICATION NUMBER: US/10/391,939A
CURRENT APPLICATION NUMBER: 60/365,491
PRIOR FILING DATE: 2002-03-19
PRIOR FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CuraSeqList version 0.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MPLPRQNHEPVAISPSSPQPAETHPTTLQGAIRREPISSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 334;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 339;
               GENERAL INFORMATION:
APPLICANT: Biogen Idec Ma Inc.
APPLICANT: Biogen Idec Ma Inc.
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Shedding of KIM-1
FILE REPERENCE: 1124 US
CURRENT APPLICATION NUMBER: US/10/718,321
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: 60/295449
PRIOR APPLICATION NUMBER: 60/295907
PRIOR APPLICATION NUMBER: E0/295907
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR SPELICATION NUMBER: PCT/US02/17402
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 100.0%; Score 432; DB 17; 11 Similarity 100.0%; Pred. No. 7.8e-36; 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 432; DB 17; Best Local Similarity 100.0%; Pred. No. 7.6e-36; Matches 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 2, Application US/10391939A; Publication No. US20050014687A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Giot, Loic;
APPLICANT: Guo, Xiaojia Sasha;
APPLICANT: Lepley, Denise M.;
APPLICANT: Mesri, Mehdi;
APPLICANT: Oo, Chean Eng;
APPLICANT: Rastelli, Luca;
APPLICANT: Rastelli, Luca;
US20050112117A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Anderson, David W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT
; ORGANISM: Homo
US-10-391-939A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-391-939A-2
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                          210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                   1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-188-012-19

j Sequence 19, Application US/10188012

j Sequence 19, Application US/10188012

j Publication No. US20030124114A1

GENERAL INFORMATION:

j APPLICANT: Wintire, Jennifer Jones

APPLICANT: Umetsu. Dale T.

j APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Rochroo, Vijay

APPLICANT: Folloon Gordon J.

TITLE OF INVERTION: Use Thereof

FILE REFERENCE: STAN-235

CURRENT APPLICATION NUMBER: US/10/188,012

CURRENT PILING DATE: 2001-06-29

NUMBER OF SEQ ID NOS: 36

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 19

LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 359;
                                                                                                                                                                                                                                               Length 359;
                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                        Query Match 100.0%; Score 432; DB 14; Best Local Similarity 100.0%; Pred. No. 8.3e-36; Matches 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 432; DB 14; Best Local Similarity 100.0%; Pred. No. 8.3e-36; Matches 81; Conservative 0; Mismatches 0;
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 17 LENGTH: 359 TYPE: PRT ORGANISM: H. sapiens FRATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 302, Application US/10295027; Publication No. US20030232350A1; GENERAL INFORMATION: APPLICANT: Afar, Daniel APPLICANT: Aziz, Natasha
                                                                                                                                                                                                                                                                                                                                                                                                                                              270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:

NAME/KEY: VARIANT

LOCATION: (1)...(359)

OTHER INFORMATION: TIM-1, allele 2
US-10-188-012-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 270 NNNOTOLFLEHSLLTANTIKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                       61 NNNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                               NAME/KEY: VARIANT
CCATION: (1)...(360)
CTHER INFORMATION: TIM-1 allele 1
US-10-188-012-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-295-027-302
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: TSe, Kam-Fai
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD
FILE REPERBNES: 21402-048
CURRENT APPLICATION NUMBER: US/10/391,939A
CURRENT PILING DATE: 2003-03-19
PRIOR PILING DATE: 2002-03-19
PRIOR PILING DATE: 2002-03-19
PRIOR PILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CLARSeqList Version 0.1
SEQ ID NO 28
LENGTH: 339
                      1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  190 MPLPRONHEPVATSPSSPQPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%; Score 432; DB 17; Length 339; I Similarity 100.0%; Pred. No. 7.8e-36; 81; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17. Application US/10188012

Sequence 17. Application US/10188012

Publication No. US20030124114A1

GENERAL INPORMATION:

APPLICANT: Walthick, Jennifer Jones

APPLICANT: Wachroo, Vijay

APPLICANT: Freeman, Gordon J.

TITLE OF INVENTION: T Cell Regulatory Genes and Methods of

TITLE OF INVENTION: T Cell Regulatory Genes and Methods of

TITLE REFERENCE: STAN-235

CURRENT FILIATION NUMBER: US/10/188,012

CURRENT FILIATION NUMBER: 60/302,344

PRIOR APPLICATION NUMBER: 60/302,344

PRIOR PILING DATE: 2001-06-29

NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                   RESULT 5
US-10-391-939A-28
Sequence 28, Application US/10391939A
Publication No. US20050014687A1
GENERAL INFORMATION:
                                                                                                                                    250 NNNQTQLFLEHSLLTANTTKG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                       Giot, Loic;
Guo, Xiaojia Sasha;
Lepley, Denise M.;
Mesri, Mehdi;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ooi, Chean Eng;
Rastelli, Luca;
Rieger, Daniel K.;
Smithson, Glennda;
Starling, Gary;
                                                                                                                                                                                                                                                                                                                       APPLICANT: Anderson, David W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-391-939A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-10-188-012-17
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                           g
                                                                                                           ò
                                                                                                                                                 셤
                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
Query Match
Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -939A-4
                                                                                                                                                                                                              LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-391
                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210 MPLPRQNHEPVATSPSSPQPAETHPTTLQCAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                  APPLICANT: Mackon, Bavid H.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Bos Blotechnology, Inc.
APPLICANT: Bos Blotechnology, Inc.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
CURRENT APPLICATION NUMBER: US 09/663,733
PRIOR FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR FILING DATE: 2001-11-12
PRIOR FILING DATE: 2001-11-12
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-12-14
PRIOR PLILORION NUMBER: US 60/340,376
PRIOR FILING DATE: 2002-01-10
PRIOR FILING DATE: 2002-01-10
PRIOR PLILORION NUMBER: US 60/347,349
PRIOR PLILOR DATE: 2002-01-00
PRIOR PLILOR DATE: 2002-01-00
PRIOR PLILOR DATE: 2002-01-00
PRIOR FILING DATE: 2002-01-00
PRIOR PLILOR DATE: 2002-01-00
PRIOR PLILOR DATE: 2002-01-00
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
PRIOR PLILOR DATE: 2002-02-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 100.0%; Score 432; DB 15; Length 359; 1.1 Similarity 100.0%; Pred. No. 8.3e-36; 81; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               270 NNNOTOLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 NNNQTQLFLEHSLLTANTTKG 81
Ginsberg, Wendy M.
                                      Glynne, Richard
Hevezi, Peter A.
Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-295-027-302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 81; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
APPLICANT: Gloc, Xiaojia Sasha;
APPLICANT: Gloc, Xiaojia Sasha;
APPLICANT: Gloc, Xiaojia Sasha;
APPLICANT: Gloc, Xiaojia Sasha;
APPLICANT: Locan Eng;
APPLICANT: Refer, Daniel I.
APPLICANT: Reger, Daniel I.
APPLICANT: Reger, Daniel I.
APPLICANT: Smithson, Glennda;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, APPLICANTON: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODE;
TITLE OF INVENTION NUMBER: 60/365,491
FRIOR APPLICATION NUMBER: 60/365,491
FRIOR APPLICATION NUMBER: 60/365,491
FRIOR PILING DATE: 2002-03-19
FRIOR FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 4
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    210 MPLPRQNHEDVAISPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                   Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                              100.0%; Score 432; DB 15;
100.0%; Pred. No. 8.3e-36;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 432; DB 17;
100.0%; Pred. No. 8.3e-36;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
PRIOR FILING DATE: 2001-11-08
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2002-04-12
NUMBER OF SEQ ID NOS: 207
SOSTWARE: PATCHIN VET. 2.1
SEQ ID NO 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 4, Application US/10391939A; Publication No. US20050014687A1; PENERAL INFORMATION: APPLICANT: Anderson, David W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                     81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81; Conservative
                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-10-391-939A-4
```

```
Best Local Similarity
Matches 81; Conserva
                                                                                                                                                                                                                                                                                                                                        US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210 MPLPRQNHEPVATSPSSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-663-497-19
US-10-663-497-19
US-10-663-497-19

Sequence 19, Application US/10663497

Publication No. US2050095593A1

GENERAL INFORMATION:

APPLICANT: Dale Umetsu

APPLICANT: Dale Umetsu

APPLICANT: Jennifer McIntire

APPLICANT: Gordon Freeman

TITLE OF INVENTION: TELL REGULATORY GENES ASSOCIATED WITH

TITLE OF INVENTION: IMMUNE DISEASE

FILE REFERENCE: STAN-235CIB

CURRENT APPLICATION NUMBER: US/10/663,497

CURRENT FILING DATE: 2003-09-15

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2002-07-01

NUMBER OF SEQ ID NOS: 40

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                GENERAL INPORMATION:
APPLICANT: Dale Umeteu
APPLICANT: Dale Umeteu
APPLICANT: Dale Umeteu
APPLICANT: Jennifer McIntire
APPLICANT: Genemarie DeKruyf
APPLICANT: Genemarie DeKruyf
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: T MMUNE DISEASE
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: 1000000
TITLE OF INVENTION: 1000000
TITLE OF INVENTION: 1000000
TITLE OF INVENTION UNMERS: 00/302,344
PRIOR PELLING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2002-07-01
NUMBER OF SEQ ID NOS: 40
SOFTWARE: PASTERE OF WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 432; DB 17; Best Local Similarity 100.0%; Pred. No. 8.3e-36; Matches 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ION: (1)...(359)
INFORMATION: TIM-1, allele 2
                          Sequence 17, Application US/10663497
Publication No. US20050095593A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: VARIANT
COCATION: (1)...(360)
COTHER INFORMATION: TIM-1 allele 1
US-10-663-497-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

DB 17; Length 359;

100.0%; Score 432;

Query Match

```
APPLICANT: Be, Xiaobing
APPLICANT: Be, Xiaobing
APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Slonim bonna
APPLICANT: Slonim bonna
APPLICANT: Slowes, Steve
TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
FILE REPERENCE: 031896-026000 (AM101264)
CURRENT APPLICATION NUMBER: US/10/847,918
PRICR APPLICATION NUMBER: US 60/471,729
PRICR FILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
                                                                                                                                          210 MPLPRQNHEPVATSPSSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 269
                                                                                                   9
                                                                                               1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application US/10718321
; Sequence 8, Application US/10718321
; Publication No. US200S0112117A1
; GENERAL INFORMATION:
; APPLICANT: Biologic No. US200S0112117A1
; APPLICANT: Bailty, Veronique
; APPLICANT: Bailty, Veronique
; APPLICANT: Bailty, Veronique
; APPLICANT: Bonventre, Joseph
; APPLICANT: Bonventre, Joseph
; APPLICANT: Bonventre, Joseph
; TITLE OF INVENTION: Molecules and Methods for Inhibiting
; TITLE OF INVENTION: Shedding of KIM-1
; FILE REPERENCE: A124 US
; CURRENT APPLICATION NUMBER: US/10/718,321
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/29549
; PRIOR PPLICATION NUMBER: 60/29549
; PRIOR PPLICATION NUMBER: 60/29549
; PRIOR PPLICATION NUMBER: PCT/US02/17402
; PRIOR PPLING DATE: 2001-06-01
; PRIOR PLING DATE: 2001-06-01
; PRIOR PLING DATE: 2002-05-31
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 100.0%; Score 432; DB 17; 1 Similarity 100.0%; Pred. No. 8.3e-36; 81; Conservative 0; Mismatches 0;
Similarity 100.0%; Pred. No. 8.3e-36; 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                              270 NNNOTOLFLEHSLLTANTIKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 25, Application US/10847918
Publication No. US20050119210A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                         61 NNNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin version 3.2
SEQ ID NO 25
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 81; Conserv
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 432; DB 14; Length 364; Best Local Similarity 100.0%; Pred. No. 8.5e-36; Matches 81; Conservative 0; Mismatches 0; Indels 0;
                                                         Query Match 100.0%; Score 432; DB 17; Length 359; Best Local Similarity 100.0%; Pred. No. 8.3e-36; Matches 81; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                    RESULT 15
US-10-188-012-25
Sequence 25, Application US/10188012
Publication No. US20030124114A1
GENERAL INFORMATION:
APPLICANT: Wonthire, Jennifer Jones
APPLICANT: Wethou, Vijay
APPLICANT: Freeman, Gordon J.
ITILE OF INVENTION: T Cell Regulatory Genes and Methods of
ITILE OF INVENTION: T Cell Regulatory Genes and Methods of
ITILE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT FILING DATE: 2002-07-01
PRIOR APPLICATION NUMBER: 06/302,344
PRIOR PILICATION NUMBER: 60/302,344
PRIOR PILICATION NUMBER: 60/302,344
PRIOR PILICATION NUMBER: 60/302,344
PRIOR PILICATION S: 36
SOFTWARE: FeastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 364
                                                                                                                                                                                                                                                             270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                    61 NNNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:

NAME/KEY: VARIANT

LOCATION: (1) ...(364)

CTHER INFORMATION: TIM-1 allele 5
US-10-188-012-25
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: H. sapiens
                 US-10-847-918-25
                                                                                                                                                                                   a
                                                                                                                                                ð
                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

g

61 NNNOTOLFLEHSLLTANTIKG 81

ò g

275 NNNQTQLFLEHSLLTANTTKG 295

Search completed: June 29, 2005, 09:33:00 Job time : 51.7642 secs

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

June 29, 2005, 08:57:16; Search time 7.32024 Seconds (without alignments) 1064.659 Million cell updates/sec Run on:

US-10-718-321-6

432 1 MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG 81 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

pir 79:*
1: pir1:*
2: pir2:*
: pir3:*
: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

SUMMAKLES Description	d the collular hepatitis hypothetical prote atrophin-1 related atrophin-1 related atrophin-1 related chromatin structur mucin like protein translation initia hypothetical prote transcription fact transcription fact transcription fact hypothetical prote SKOC25 protein - hypothetical prote SKOC25 protein - hypothetical prote SKOC25 protein - hypothetical prote SKOC25 protein - hypothetical prote SKOC25 protein - hypothetical prote fibrinogen-binding nuclear pore compl hypothetical prote probable myb-relat type I transmembra evolved beta-0-gal hypothetical prote hypothetical prote hypothetical prote
-	71754 71754 71742031 71742031 71742031 71742031 71742031 71742031 71742031 71757 717
DB	000000000000000000000000000000000000000
Length	10000 10000
ያታ	18.0 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Score	8 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Result No.	22222222222222222222222222222222222222

Typedian Type of the translated from Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Type the Everision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T24643
R;McMurray, A.
Submitted to the EWBL Data Library, June 1996
A;Reference number: Z19916
A;Reference number: Z19916
A;Reference number: Z19916
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Status: preliminary
A;Molecule type: DNA
A;Residues: J-1007 vMIL>
A;Molecule type: DNA
A;Residues: J-1007 vMIL>
A;Koss-references: UNIPROT:022286; EMBL:Z73976; PIDN:CAA98287.1; GSPDB:GN00023; CESP:TO*
C;Genetics:
C;Genetics:
C;Genetics:
A;Genetics:
A;Genetics:
A;Map position: 5
A;Introns: 137/1; 178/2; 275/1; 295/3; 336/2; 390/1; 747/1; 846/3; 890/1; 953/2

hypothetical prote mucin MUCSB, trach	hypothetical prote	conserved hypothet	agglutinin-like ad	HrpW protein - Erw	DNA topoisomerase	hypothetical prote	proliferation pote	hypothetical prote	excision repair pr	DNA-binding protei	hypothetical prote	defective chorion-	transforming prote	lammer kinase homo
A70525 A53767	T34274	G96017	T30531	T18447	JC6552	T19050	T42727	T23891	S50507	S39484	T28013	C44766	S15704	JC7794
~ ~	N	~	~	~	~	N	~	~	~	~	~	~	N	0
620 1056	2018	137	1419	447	1015	1186	1560	322	398	575	881	1589	437	575
15.7	15.7	15.6	15.6	15.5	15.5	15.5	15.5	15.4	15.4	15.4	15.4	15.4	15.3	15.3
68	68	67.5	67.5	67	67	67	67	66.5	66.5	66.5	66.5	66.5	99	99

ALIGNMENTS

 RESULT 1 871754
cellular hepatitis A receptor HAVor-1 precursor - green monkey N;Alternate names: surface glycoprotein C;Species: Cercopithecus aethiops (green monkey, grivet)
C;Date: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004 C;Accession: S71754
 R;Kaplan, G.; Totsuka, A.; Thompson, P.; Akatsuka, T.; Moritsugu, Y.; Feinstone, S.M. EMBO J. 15, 4282-4296, 1996
 A; Title: Identification of a surface glycoprotein on African green monkey kidney cells as A; Reference number: S71754; MUID:97015129; PMID:8861957
A; Accession: S71754
A;Residues: 1-451 «KAP»
A; Cross-references: UNIPROT: 095144; EMBL: X98252; NID: 91526573; PID: e247449; PID: 91526574
A. Paperimeirar Bource: A. Laurey C. Keywords: glycoprotein
F:1-17/Domain: Bignal sequence #status predicted <sig> F:18-451/Product: cellular hepatitis A receptor HAVcr-1 #status predicted <mat></mat></sig>
 Query Match 80.6%; Score 348; DB 2; Length 451; Best Local Similarity 82.5%; Pred. No. 1.5e-26; Matches 66; Conservative 3; Mismatches 11; Indels 0; Gaps 0;
 Qy 2 PLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN 61
Db 291 PLPMQNHEPVATSPSSPQPAETHPVTLLGATRIQPISSPLYSYTTDGSDTVTESSDGLWN 350
Oy 62 NNQTQLFLEHSLLTANTTKG 81
 Db 351 NNQTQLSPEHSPQMVNTTEG 370

Matches

셤

ઠે

g

ò

```
mucin like protein Muc2 precursor - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Accession: 14-Jul-1994 #sequence_revision 14-Jul-1994 #text_change 16-Aug-2004
C;Accession: PC2022
R;Hansson, G.C.; Baeckstroem, D.; Carlstedt, I.; Klinga-Levan, K.
Biochem. Biophys. Res. Commun. 199, 181-190, 1994
A;Title: Molecular cloning of a cDNA coding for a region of an apoprotein from the 'insol A;Reference number: PC2022; MUID:94121629; PMID:8292021
A;Accession: PC2022
A;Molecule type: mRNA
A;Residues: 1-235 <HAN>
A;Residues: 1-235 <HAN>
A;Cross-references: UNIPROT:Q63349; GB:Z29072; NID:g435534; PIDN:CAAB2313.1; PID:g435535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cispecies: Caenorhabditis elegans
Cispecies: Caenorhabditis elegans
Cispecies: Caenorhabditis elegans
Cispecies: Caenorhabditis elegans
Cispecies: Caenorhabditis elegans
Cispecies: Caecesion: T34369
Submitted to the EMBL Data Library, November 1995
A; Pescription: The sequence of C. elegans cosmid T19D12.
A; Reference number: Z21513
A; Accession: T34369
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-1777
A; Coss-references: UNIPROT: Q22579; EMBL: U41263; PIDN: AAC24428.1; GSPDB: GN00020; CESP:T118
A; Experimental source: strain Bristol N2; clone T19D12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 translation initiation factor eIF4-gamma - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C;Accession: 146707
R;Yan, R; He, W; Rhoads, R.E.
J. Biol. Chem. 268, 19200-19203, 1993
A;Title: Mapping the cleavage site in protein synthesis initiation factor eIF-4 gamma of A;Reference number: 146707; MUID:93374895; PMID:8396129
A;Accession: 146707
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNA
A;Residues: 1-1402 <YAN>
A;Cross-references: UNIPROT:P41110; GB:L22090; NID:g404774; PIDN:AAA31242.1; PID:g404775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Map position: 1
(Superfamily: von Willebrand factor type A repeat homology; von Willebrand factor type C; Superfamily: von Willebrand factor type C; Superfamily: von Willebrand factor type C; Seywords: glycoprotein
(F; 1-53) Region: cysteine-rich
(F; 1-53) Region: gerine/threonine-rich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         167 PIVTETSTPRSTTTQTPSTVSTTTGTPTTTTTTTTTTTTTTTTTTTTTQT 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10 PVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNNNQT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 LPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVT 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 1402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
16.7%; Score 72; DB 2; Length 235;
Best Local Similarity 30.4%; Pred. No. 7.4;
Matches 17; Conservative 7; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein T19D12.1 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 72; DB 2
Pred. No. 67;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.7%;
35.3%;
                                                                                                                                                                                                                                                                                                                                                                                                     A, Experimental source: intestine C, Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Accession: T42731
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-1006 <KGHA>
A;Cross-references: UNIPROT:Q62901; EMBL:U44091; NID:g1297310; PID:g1209103; PIDN:AAA989
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Rattus norvegicus (Norway rat)
C;Abate: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
C;Accession: T42731
R;Khan, F.A.; Margolis, R.L.; Loev, S.L.; Sharp, A.H.; Li, S.H.; Ross, C.A.
R;Khan, F.A.; Margolis, R.L.; December 1995
A;Description: CDNA sequence and expression of an atrophin-1 (DRPLA disease gene) relate
A;Reference number: Z22250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chromatin structural protein homolog Supt5hp - mouse C;Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004 C;Accession: T42204 #sequence_revision 03-Dec-1999 #text_change P.W.; Stubbs, L.; Zhang, L.; Kurnit, D.M. Genomics 47, 426-428, 1998 A;Title: Isolation of murine SPTS homologue: completion of the isolation and characteriz A;Reference number: Z22072; MuD:98149995; PMID:9480761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: UNIPROT:O55201; EMBL:U88539; NID:g2754751; PID:g2754752; PIDN:AAC40q
C;Genetics:
                                                                       э
;
                                                                                                                                                                                                    540 PSENILPPGTLPSNPAPID-----VRRSPVASS-HFYNTNOPTLVTDNDQENQKTL 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900 PSPQSYHQ-VAPSPAGYQNTHSPASYHPTPSPMAYQASPSPSPVGYSPMTPGAPSPGGYN 958
                                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434 PLPSSSPAQPPGLTQSQSLPPPPAASHPTT--GGLHQVPSQSPFPQHPFVPGGPPPTTPPS 490
                                                                                                                                       4 PRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSD-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 PLPRONHEP -- VATSPSSPOPAETHPTTLOGAIRREPTSSPL--YSYTTDGNDTVTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                       23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 9
   Length 1007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2; Length 1082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17.6%; Score 76; DB 2; Length 1006; 33.9%; Pred. No. 18; tive 9; Mismatches 24; Indels
      18.4%; Score 79.5; DB 2; Length 10
26.1%; Pred. No. 8.1;
tive 11; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 PLPRONHEPVATSPSSPQ----PAETHPTTLQGAIRREPTSSPL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA
A;Residues: 1-1082 <CHI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | | : : | | | | | PHTPGSGIEQNSSD--WVTTDIQVKVRDTYL 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16.8%; Score 72.5; DB 28.6%; Pred. No. 43; tive 11; Mismatches
                                                                                                                                                                                                                                                                                                                                 590 VDLAKKFĞLWEESSPYLTTHPPIARNT 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44 YTTDGNDTVTESSDGLWNNNQTQLFLEHSLL
                                                                                                                                                                                                                                                                    58 -----GLWNNNQTQLFLEHSLLTANT 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atrophin-1 related protein - rat
                                                                       23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 26; Conserv
      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C,Genetics:
A,Gene: Supt5h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              959
```

A; Gene: ARP

Matches

g

8

RESULT 5

원

8

ð

ന

```
A;Residues: 1-1095 <PRI>A;Residues: 1-1095 <PRI>A;Cross-references: UNIPROT:Q02342; GB:M82964; NID:g171186; PIDN:AAA34479.1; PID:g171187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SKCDC25 protein - yeast (Saccharomyces kluyveri) (fragment)
C;Species: Saccharomyces kluyveri
C;Species: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: PC1114
R;Prigozy, T.; Gonzales, E.; Broek, D.
Gene 117, 67-72, 1992
A;Title: Identification and analysis of a DNA fragment from Saccharomyces kluyveri that A;Reference number: PC1114; MUID:92384938; PMID:1644315
A;Accession: PC1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Keywords: transmembrane protein
F;808-1049/Domain: CDC25-type guanine nucleotide exchange activator homology <SOS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-648 «MIL.
A;Coss-references: EMBL:246792; PIDN:CAA86766.1; GSPDB:GN00020; CESP:C52A11.1
A;Experimental source: clone C52A11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                156 HEPKEPLKEVKOTPILÞQPVRRTSKEFVVTPVKEAELHDAEPTSMPPK-APEPTTAPLRR 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----AETH---PTTLQGAIRREPTSSPLYS 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                          221 DLGAAAVASAAYGWNTAYSGLGPARSQFPYAQYASDYYGN-AVGMSSSAAWFSHQERLY 278
           --- PLYSYTTD--GNDTVTESSDGLWNNNQTQLF 68
                                                                                                                                                                                     hypothetical protein C52A11.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T20144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 PRONHEDV-ATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLWNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       T45053 hypothetical protein Y39B6B.aa [imported] - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2; Length 1095;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
16.3%; Score 70.5; DB 2;
Best Local Similarity 32.6%; Pred. No. 36;
Matches 28; Conservative 10; Mismatches 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Map position: 2
A;Introns: 87/3; 237/3; 272/2; 456/1; 565/1; 622/1
                                                                                                                                                                                                                                                                                                          R;Sulston, J.
submitted to the EMBL Data Library, November 1994
A;Reference number: Z19229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
16.3%; Score 70.5; DB
Best Local Similarity 23.1%; Pred. No. 69;
Matches 15; Conservative 19; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 YTTDGNDT-VTESSDGLWN---NNOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 HEP-----VATSPSSPQP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              162 NSPNL 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63 NOTOL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Gene: CESP: C52A11.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                            A, Accession: T20144
           40 ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Gene: SKCDC25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
           ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ଟ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            submitted to the EMBL Data Library, October 1995
A;Description: The sequence of C. elegans cosmid C39D10.
A;Reference number: Z18403
A;Accession: T15787
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;References: EMBL:U39678; NID:g1049439; PID:g1049446; PIDN:AAA80424.1; CESP:C39D1
A;Gene: CESP:T19D12.1
A;Map position: 2
A;Introns: 36/1; 134/2; 180/1; 622/3; 691/2; 754/1; 1111/2; 1174/1; 1271/3; 1322/2; 1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics:
A;Gene: CBSP:C39D10.7
A;Introns: 19/2; 54/2; 89/2; 146/1; 207/2; 348/2; 430/2; 517/2; 858/1; 889/2; 927/3; 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Drosophila sp.
C;Date: 18-Feb-1994 #sequence_revision 01-Dec-1995 #text_change 07-May-1999
C;Date: 18-Feb-1994 #sequence_revision 01-Dec-1995 #text_change 07-May-1999
C;Accession: 339356
B;Wimmer, B.A.; Jaeckle, H.; Pfeifle, C.; Cohen, S.M.
Nature 366, 690-694, 1993
A;Title: A Drosophila homologue of human Sp1 is a head-specific segmentation gene.
A;Reference number: S39356; MUID:94081952; PMID:8259212
A;Accession: S39356
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-644 <WIM>A;Residues: 1-644 <WIM>A;Cross-references: EMBL:Z29361; NID:9441283; PID:9441284
                                                                                                                                                                                                                                                          248 PRITYVPRSTSAAPPNPPPQNPTAAP-YVPTEATPSPVFSSTVRYNPAVHGDCKONRDGIF 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 LPRQNHEPVATSPSSPQPAETHPT---TLOGAIRREPTSSPL-YSYTTDGNDTVTESSDG 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 PRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTV---TESSDGLW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Species: Caenorhabditis elegans
Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999
Accession: T15787
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                       4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
16.3%; Score 70.5; DB 2; Length 644;
Best Local Similarity 22.7%; Pred. No. 36;
Matches 27; Conservative 10; Mismatches 29; Indels 5:
                                                                                                         k; Score 72; DB 2; Length 1777;
k; Pred. No. 89;
15; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 16.4%; Score 71; DB 2; Length 1131; Local Similarity 31.7%; Pred. No. 64; 19; Conservative 11; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 PLPRONHEPVATSPSSPQPAETHPTT-LQGAIRREPTSS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
T15787
hypothetical protein C39D10.7 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               transcription factor btd - fruit fly (Drosophila sp.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,Gene: FlyBase:btd
A,Cross-references: FlyBase:FBgn0000233
A,Introns: 245/2
                                                                                                                                                                                                                                                                                                                                                                                    973 SFOSPOSTTQIGSSTTVPST 992
                                                                                                                                                                                                                                                                                                                                   59 LWNNNQTQLFLEHSLLTANT 78
                                                                                                           Query Match
Best Local Similarity 28.8%;
Matches 23; Conservative 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Genetics:
                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

us-10-718-321-6.rpr

```
probable outer membrane protein - Helicobacter pylori (strain J99)
C;Species: Helicobacter pylori
A;Variety: strain J99
C;Species: Helicobacter pylori
A;Variety: strain J99
C;Accession: G71957
R;Alm, R.A.; Ling, L.S.L.; Moir, D.T.; King, B.L.; Brown, E.D.; Doig, P.C.; Smith, D.R.; Irves, C.; Gibson, R.; Merberg, D.; Mills, S.D.; Jiang, Q.; Taylor, D.E.; Vovis, G.F.; J Nature 397, Jf6-180, 1992
A;Title: Genomic sequence comparison of two unrelated isolates of the human gastric pathc A;Reference number: A71800; MUD: 99120557; PMID: 9923682
A;Accession: G71957
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-479 cARN>
A;Cross-references: UNIPROT;Q9ZMI3; GB:AE001461; GB:AE001439; NID:g4154749; PIDN:AAD0581: A;Experimental source: strain J99
C;Genetics: Junear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 SPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTD--GNDTVTESSDGLWNN-----N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Superfamily: Helicobacter pylori outer membrane protein omp20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Match 16.1%; Score 69.5; L
Local Similarity 35.7%; Pred. No. 31;
les 25; Conservative 7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search completed: June 29, 2005, 08:58:11
Job time : 8.32024 secs
                                           89 NN 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          jhp0237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:Q9NET3; EMBL:AL132896; NID:g6434440; PIDN:CAB60932.1; PID:g6
A;Experimental source: clone Y39B6B
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-654 <DIE>
A; Residues: 1-654 <DIE>
A; Cross-references: UNIPROT:P17121; EMBL:U32274; NID:g927313; PID:g927322; MIPS:YDR389w
A; Cross-references: UNIPROT:P17121; EMBL:U32274; NID:g927313; PID:g927322; MIPS:YDR389w
B; Dunn, Th.M.; Shortle, D.
Mol. Cell: Biol: 10, 2308-2314, 1990
A; Title: Null alleles of SAC7 suppress temperature-sensitive actin mutations in Sacchard
A; Reference number: A34712; MUID:90220616; PMID:2183030
C;Species: Caenorhabditis elegans
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 09-Jul-2004
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 09-Jul-2004
C;Accession. R; Ainscough, R.; Anderson, K.; Baynes, C.; Berks, M.; Bonfield, J.; Burton, raser, A.; Fulton, L.; Gardner, A.; Green, P.; Hawkins, T.; Hillier, L.; Jier, M.; Johns B.; O'Callaghan, M.; Parsons, J.; Percy, C.; Rifken, L.; Roopra, A.; Saunders, D. Nature 368, 32-38, 1994
A;Authors: Shownkeen, R.; Sims, M.; Smaldon, N.; Smith, A.; Smith, M.; Sonnhammer, E.; S. A;Authors: Shownkeen, R.; Sims, M.; Smaldon, N.; Smith, A.; Smith, M.; Sonnhammer, E.; S. A;Reference number: S43531; MUID:94150718; PMID:7906398
A;Reference number: S43531; MUID:94150718; PMID:7906398
A;Residues preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
A;Residues: 1-321 - VMID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CiSpecies: Saccharomyces cerevisiae
CiSpecies: S2-Aug-1996 #sequence_revision 06-Sep-1996 #text_change 09-Jul-2004
CiAccession: S69673; A34712
Ribietrich, F.S.
Bubitted to the EMBL Data Library, July 1995
A; Description: The sequence of S. cerevisiae cosmids 9481, 9509, 9926, 9461, and lambda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 LPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSD----G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 PRONHEPVATSPSSPQ--PAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 247-497,'LRMLLLVI',506,'EERVYSRGYINREF' <DUN>
A;Cross-references: GB:M32335; NID:g172531; PIDN:AAA35016.1; PID:g172532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 16.2%; Score 70; DB 2; Length 654; Similarity 35.5%; Pred. No. 41; 22; Conservative 3; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16.2%; Score 70; DB 2; Length 321; 29.1%; Pred. No. 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Map position: 3
A;Introns: 41/2; 95/2; 131/1; 170/3; 208/1; 236/2; 279/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23; Conservative 13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SAC7 protein - yeast (Saccharomyces cerevisiae)
N;Alternate names: protein YDR389w
C;Species: Saccharomyces cerevisiae
C;Date: 22-Aug-1996 #sequence_revision 06-Sep-1
C;Accession: 869673; A34712
R;Dietrich, F.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: SGD:S0002797; MIPS:YDR389w
A;Map position: 4R
C;Keywords: cytoskeleton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59 LWNNNQTQLFLEHSLLTAN 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  :: : |||
----AKYGIFTAN 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 22; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
Matches 23; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S69673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A34712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 NN 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A, Note: Y39B6B.aa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Gene: SGD: SAC7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

3,

Gaps

11;

27; Indels

DB 2; Length 479;

```
chitinase (EC 3.2.1.14) II precursor - Aeromonas sp.
C;Species: Aeromonas Sp.
C;Species: Aeromonas Sp.
C;Species: D-Jul-1996 #sequence_revision 19-Jul-1996 #text_change 09-Jul-2004
C;Accession: I39540
R;Ueda, M; Kawaguchi, T: Arai, M.
R;Ueda, M; Kawaguchi, T: Arai, M.
A;Friment. Biocang. 789, 205-211, 1994
A;Frite: Molecular cloning and nucleotide sequence of the gene encoding chitinase II from A;Reference number: I39540
A;Accession: I39540
A;Accession: I39540
A;Accession: BNA
A;Residues: 1-542 <RES>
A;Residues: 1-542 <RES>
C;Keywords: glycosidase; hydrolase; polysaccharide degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 PLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 16.1%; Score 69.5; DB 2; Length 542; 1 Similarity 27.5%; Pred. No. 36; 22; Conservative 10; Mismatches 45; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             403 GGATVAYNGHNYQAKWWTQG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                 104 QALVNLEQSL 113
                                                                              64 QTOLFLEHSL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 22; Conserva
```

```
June 29, 2005, 08:57:16; Search time 29.8703 Seconds (without alignments) 543.815 Million cell updates/sec
                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGL.....NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                       2105692
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                           2105692 segs, 386760381 residues
                                                                                   OM protein - protein search, using sw model
                                                                                                                                                                                                             US-10-718-321-6_COPY_40_
                                                                                                                                                                                                                                                                                                                  Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                            DB seq length: 0
DB seq length: 200000000
                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum I
Maximum I
                                                                                                                          Run on:
                                                                                                                                                                                                             Title:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. geneseqp2002s: * geneseqp2003as: * geneseqp2003bs: * geneseqp2004s: *

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqp1990s:*geneseqp2000s:*geneseqp2001s:*

Geneseq 16Dec04:* geneseqp1980s:*

Database

		عد			SUMMARIES	
Result No.	Score	Query Match	Query Match Length	DB	ID	Description
1	225	100.0	81	9	AA026678	Aao26678 Human KIM
7	225	100.0	298	œ	ADQ76693	Adq76693 Human KIM
m	225	100.0	334	N	AAW38336	
4	225	100.0	334	9	AA026679	Aao26679 KIM-1 rel
2	225	100.0	334	œ	ADQ76696	Adq76696 Human kid
9	225	100.0	339	7	ADE36618	Ade36618 Plasmid p
7	225	100.0	339	7	ADE36592	Ade36592 Human NOV
80	225	100.0	359	9	ABR58582	Abr58582 Human can
0	225	100.0	359	9	ABP70439	Abp70439 Amino aci
10	225	100.0	359	9	ABP70438	Abp70438 Amino aci
11	225	100.0	359	9	ABR48174	Abr48174 Human bla
12	225	100.0	359	9	AA026680	Aao26680 KIM-1 rel
13	225	100.0	359	7	ADE36594	Ade36594 Human NOV
	225	100.0	359	7	ADN38984	Adn38984 Cancer/an
	225	100.0	359	œ	ADQ76690	Adq76690 Human kid
16	225	100.0	364	9	ABP70442	Abp70442 Amino aci
17	225	100.0	365	9	ABP70440	Amino
18	225	100.0	518	œ	ADQ76691	Adq76691 Human KIM
19	220	97.8	359	9	ABP70441	Abp70441 Amino aci
20	220	97.8	364	9	ABP70443	Abp70443 Amino aci
21	189	84.0	263	7	ADE36629	Human
22	189	84.0	263	7	ADE36622	Ade36622 Plasmid p
23	189	84.0	263	7	ADE36596	Ade36596 Human NOV
24	178	79.1	451	~	AAR92803	Aar92803 Hepatitis
25	101	44.9	18	9	AA026686	Aao26686 Human KIM

Aao26687 Human KIM Aao26673 Monoclona	Aao26688 Human KIM Aao26685 Human KIM	Aar51705 Neurotrop	Aawszeen charken n Aab78898 C. glutam	Aab48099 Amino aci	Aae08550 Chicken n			Aae18306 Venezuela	Aaw38334 Rat kidne	Ads41629 Bacterial	Abu31130 Protein e	Abb55478 Lactococc	Aag19395 Arabidops	Aag53467 Arabidops	Aag19394 Arabidops	Aag53466 Arabidops
AA026687 AA026673	AAO26688 AAO26685	AAR51705	AAB78898	AAB48099	AAE08550	ADG93320	ADG93318	AAE18306	AAW38334	ADS41629	ABU31130	ABB55478	AAG19395	AAG53467	AAG19394	AAG53466
99	9 9	~ (4 4	4	4,	00	80	Ŋ	~	60	9	ß	m	m	٣	ო
18	18 18	602	909	1070	1070	774	775	981	307	619	2399	1658	219	249	249	268
00	o. 4.	٠. ۱		۲.	۲.	0.	0	₩.	m.	۳.	'n	٦.	φ.	ō.	٥.	o.
4 4 4 4	40 36	26.7	5 e	26.7	56	56	26.0	25.8	25.3	25.3	25.3	25	24	24	24	24
6 6 6	8 8 8 8	9	86	9	09	58.5	58.5	28	57	57	57	56.5	26	26	26	26
26	28 29	30	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

Cytostatic, gene therapy, antibody, antigen, antigen-binding, proteolytic release, inhibitor; kidney injury molecule-1, KIM-1, renal disease, injury, renal cancer; human. Human KIM-1 mucin domain protein, SEQ ID No 6. AAO26678 standard; protein; 81 AA. (first entry) Homo sapiens. 20-MAR-2003 AA026678

WO200298920-A1.

12-DEC-2002.

31-MAY-2002; 2002WO-US017402.

01-JUN-2001; 2001US-0295449P.

(BIOJ) BIOGEN INC. (GEHO) GEN HOSPITAL CORP.

Bailly V, Bonventre J;

WPI; 2003-156845/15.

New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury, e.g. renal cancer

Disclosure; Fig 1A; 42pp; English.

The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal acancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a human KIM-1 mucin domain protein of the invention

inhibiting disease relapse in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; treating a Th2 cell-mediated disease (e.g. mysathenia gravis, autoimmune haemolytic anaemia. Chagas disease, Grave's disease, idiopathic thrombocytopenia purpura, Wegener's granulomatosis, polyarteritis nodosa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, and ileitis); and inhibiting secretion of IFN-gamma by lymphocytes.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                                                                                                            Gaps
                                                                                                               ö
                                                    100.0%; Score 225; DB 6; Length 81; 100.0%; Pred. No. 3.3e-21;
                                                                                                            Indels
                                                                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 81
                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human KIM-1 extracellular domain-6xHis fusion.
                                                                      100.0%; Preq. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/label= Signal_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                      ADQ76693 standard; protein; 298 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 33; 68pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                               42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             one or more antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-534277/51.
                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004060041-A2.
Sequence 81 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rennert PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ76693;
                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ношо
                                                                                                            Matches
                                                                                                                                                                                                                                                                                                        RESULT 2

ADQ76693

AAC ADQ76693

XX ADQ76693

XX ADQ76693

BE Hume
XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20

XX MW MU20
g
                                                                                                                                                                       ð
                                                                                                                                                                                                                         셤
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       regulated in injured or regenerating tissue. Its amino acid sequence was deduced from a clone (see AAP36035) obtained from a human embryonic liver library, A 572-amino acid (see AAW38335) and a 307-amino acid rat KIM see AAW38334) are also claimed. Recombinant KIM polypeptides can be expressed in prokaryotic and eukaryotic host cells using a claimed process. Soluble variants fused to a toxin, imageable compound or adoinuclide, and IgG fusion proteins are also claimed. KIM, or an agonist, can used to treat renal disease and to promote the growth of new tissue or the survival of damaged tissue, generally in conditions where the binding of specific ligand to KIM stimulates cell growth, maintains cellular differentiation or reduces apoptosis, e.g. in cases of renal failure, mephritis, kidney transplants, toxic or hypoxic injury. A failure, mephritis, kidney transplants, tox be used to treat renal disease, e.g. where binding of KIM to ligand results in neoplasia, loss of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA encoding kidney injury related molecule - which is upregulated in injured or rejenerating tissue, useful to promote growth of new tissue and survival of damaged tissue.
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This protein, designated kidney injury related molecule (KIM), is up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kidney injury related molecule; KIM; human; renal disease; injury; nephritis; tissue regeneration; therapy; monoclonal antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wei H;
                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                  Length 298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hession CA, Ichimura T,
                                                                                                                                                                                                  ; Score 225; DB 8; Length 2; Pred. No. 1.6e-20; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                           249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                        1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human kidney injury related molecule (KIM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 9; Page 46-47; 68pp; English.
                                                                                                                                                                                                                                                                                                                                                                                           AAW38336 standard; protein; 334 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sanicola-Nadel M, Bonventre JV,
                                                                                                                                                                                                      100.08;
                                                                                                                                                                                                                      100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-US009303.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-0018228P.
96US-0023442P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                         42; Conservative
                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1998-018514/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC
                                                                                                                                                                      Sequence 298 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9744460-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-MAY-1996;
23-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                              AAW38336;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cate RL;
                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                            AAW38336
88888888888
                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                       셤
```

The present sequence is that of a polypeptide comprising the extracellular domain (residues 1-290) of human kidney injury molecule-1 (XIM-1) ADQ76690 fused to a C-terminal 6xHis tag peptide. A plasmid comprising DNA encoding this sequence under control of a CWV promoter was used for transient constitutive expression of the polypeptide in mammalian cells in an example from the invention. The invention provides methods for therapeutically modulating immune function in autoimmune cliseases and other disorders of the mammalian immune system. A method is clismed for inhibiting signalling between a T cell and second cell, e.g. an antigen-presenting cell, in a mammal. The method involves identifying a mammal with an immune disease or disorder, or one preparing corrective a tissue graft, and administering a KIM-1 antagonist, cepecially a polypeptide comprising: a KIM-1 ig domain, and lacking a transmembrane domain and a KIM-1 cytoplasmic domain, an anti-KIM-1 antagonist is a soluble polypeptide, which can include a KIM-1 mucin domain in addition to the KIM Ig domain, and may conjugated to a polymer such as polyethylene glycol. The KIM-1 antagonist is include a heterologous moiety such as an Pc moiety. The Alm-1 antagonist is conjugated to a polymer such as polyethylene glycol. The KIM-1 antagonist is used in methods of: inhibiting activation of a B cell in a mammal;

ö

Gaps

ö

0; Indels

Mismatches

ö

42; Conservative

Matches

ö

```
The invention relates to a novel antibody, antibody derivative or antigen binding polypeptide that inhibits s proteolytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence reperseents a protein relating to the KIM-1
cellular function, susceptibility to apoptosis or promotion of inflammation, deliver imaging agents to KIM expressing cells in vivo or in vitro and measure KIM concentration by immunoassay. Banage/regeneration of renal cells can be determined by measuring KIM, particularly to diagnose or monitor the progress of disease or therapy. KIM-expressing tumour cells can be inhibited by treatment with a fusion protein comprising KIM ligand on Mab with a toxin or radionuclide, and tumour cells that express KIM ligand can be inhibited with similarly tagged KIM or anti-KIM ligand antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; human.
                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                     100.0%; Score 225; DB 2; Length 334; 100.0%; Pred. No. 1.9e-20;
                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 39-40; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KIM-1 related protein, SEQ ID No 7.
                                                                                                                                                                                                                                                                                                                                                                                                                       Ź
                                                                                                                                                                                                                                                                                                                                                                                                                     AAO26679 standard; protein; 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002WO-US017402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2001; 2001US-0295449P
04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                    Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-156845/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e.g. renal cancer
                                                                                                                                                                                   Sequence 334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200298920-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ното варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA026679;
                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                RESULT 4
AAO26679
 8888888888888
                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                            ઠે
```

Length 334;

Score 225; DB 6; Pred. No. 1.9e-20;

100.0%;

Query Match Best Local Similarity

Sequence 334 AA;

protein of the invention

```
The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (Ig) and mucin domain (TIM) family. This protein has 334 amino acids or 359 amino acids ADQ76690, depending on splice variation. It has been discovered that treatment of ammmal with a KIM-1 antagonist alters the interaction of T cells and other immune system cells, e.g. dendritic cells, monocytes, macrophages and B cells, and thereby strongly suppresses an IgG response to an antigen. Such treatment also eliminates lgG1 production by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor reduces secretion of interferon-gamma by immune cells engaged in an antigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention provides methods for therapeutically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "C-terminal region unique to this splice variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against one or more antigens.
                                                                                                                                                                                                                                               Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide;
muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic;
antiallergic; antiinflammatory; vasotropic; nephtropic.
                    249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
 42
1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Transmembrane domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               286. .288
/note= "N-glycosylated"
                                                                                                                                                                                                              Human kidney injury molecule-1 (KIM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                  "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .20
/label= Signal_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 1; 68pp; English.
                                                                                                                 Ş
                                                                                                               ADQ76696 standard; protein; 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOG-) BIOGEN IDEC MA INC
                                                                                                                                                                                                                                                                                                                                                                                                 65. .67
/note= "N-
258. .260
                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . .334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-534277/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004060041-A2
                                                                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                 16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rennert PD;
                                                                                                                                                ADQ76696;
                                                                                                                                                                                                                                                                                                                                                                Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Region
                                                                                                                                                쇰
ઠ
```

```
modulating immune function in autoimmune diseases and other disorders of the mammalian immune system. A method is claimed for inhibiting signalling between a T cell and a second cell, e.g. an antigan-presenting cell, in a mammal. The method involves identifying a mammal with an immune disease or disorder, or one preparing to receive a tissue graft, can and administering a KIM-1 antagonist, especially a polypeptide comprising: a KIM-1 in addition and a kIM-1 cytoplasmic domain, and include a transmembrane domain and a KIM-1 cytoplasmic domain, and may include a KIM-1 mucin domain in addition to the KIM ig domain, and may include a KIM-1 mucin domain in addition to the KIM ig domain, and may include a RIM-1 mucin domain in addition complety. The antagonist is used in methods of:

CC moiety. The antagonist may be conjugated to a polymer such as polyethylene glycol. The KIM-1 antagonist is used in methods of:

inhibiting activation of a B cell in a mammal; inhibiting disease relapse in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting epitope spreading in an autoimmune disease; inhibiting adisease (e.g. mysthenia gravis, autoimmune haemolytic anaemia, Chagas disease, Grave's disease, catterities nodesa, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crohn's transamma but inhibiting secretion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IFN-gamma by lymphocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 334 AA;
             $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
```

```
Gaps
                                    ö
 100.0%; Score 225; DB 8; Length 334; 100.0%; Pred. No. 1.9e-20;
                                  0; Indels
                                                                                     249 PLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKG 290
                                                                   1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                  0; Mismatches
                                  42; Conservative
                  Best Local Similarity
Query Match
                                    Matches
                                                                    δ
                                                                                                 셤
```

ö

human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing. Plasmid pCR2.1-CG57008-03-S843 15B protein insert SEQ ID NO:28. ADE36618 standard; protein; 339 AA 29-JAN-2004 (first entry)

Homo sapiens. Synthetic

02-OCT-2003

WO2003080856-A2.

19-MAR-2003; 2003WO-US008490.

19-MAR-2002; 2002US-0365491P. 13-SEP-2002; 2002US-0410618P.

(CURA-) CURAGEN CORP.

Rastelli L, Smithson G, Giot L, Starling G; Тве К, Gno X, M, Rieger DK, Anderson DW, WPI; 2003-876927/81. N-PSDB; ADE36617 Lepley DM, Ooi CE, An

Mesri M;

New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.

Example 1; SEQ ID NO 28; 239pp; English

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
               where
                            X is la to 1 or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents a pCR2.1-CG57008-03-S843 158 protein insert, which is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes an isolated human NOVX polypeptide, where X is la to 1d or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. represents human NOVIa from the present invention.
                                                                                                                                                                                                                                                                                                         Gaps
               present invention describes an isolated human NOVX polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mesri M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine; renal cancer; inflammation; tissue typing.
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                     100.0%; Score 225; DB 7; Length 339; 100.0%; Pred. No. 1.9e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rastelli L, Smithson G, Giot L, Starling G;
                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                229 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 270
                                                                                                                                                                                                                                                                                                                                             1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 2; 239pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE36592 standard; protein; 339 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human NOV1a protein SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tse K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAR-2003; 2003WO-US008490.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                         42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rieger DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anderson DW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-876927/81.
                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ADE36591
                                                                                                                                                                                                                                     Sequence 339 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003080856-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lepley DM,
Ooi CE, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE36592;
                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
ADE36592
$88888888888888$$
                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                               g
```

S

ö

```
comprises the sequence of any of the genes that are up-regulated with microardian described and sold molecule, which comprises the sequence of any of the genes that are up-regulated in regulated in specific cancers (e.g. about 1031 genes up-regulated in acute lymphocytic leukemia). ACC72641 to ACC72860 represent cancer related gene mucleotide sequences which encode the proteins given in ABRS8521 to ABRS8709. Also described above; (1) determining the presence or absence of a pathological cell in a patient; (2) an expression vector comprising a nucleic acid molecule described above; (3) a host cell comprising the vector; (4) an isolated polypeptide, which is encoded by the nucleic acid; (5) an antibody that specifically binds the polypeptide of (4); (6) specifically targeting a compound to a pathological cell in a comparient by administering to the patient the antibody above; and (7) a drug screening assay. The nucleic acid is useful as diagnostic markers or therapeutic targets. In particular, the nucleic acid is useful for diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow, bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary, concerned, skin and uterus), wounds, ischaemia, heart diseases, atherosclerosis and endometriosis. The nucleic acid is also useful in drug screening, particularly for identifying agents for treating these pathologies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes an isolated nucleic acid molecule, which
                                                                                                                                                                                                                                                                                                                                                                                                                        Human, cancer; diagnosis; screening; modulator; leukaemia; ischaemia; heart disease; atherosclerosis; endometriosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New genes that are up-regulated or down-regulated in cancers, useful markers for diagnosing e.g. cancer, ischemia or heart diseases, or as therapeutic targets for screening drugs for treating these diseases.
                                                                               Gaps
                                                                               ;
                                     Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wilson KE;
                                                                               Indels
                                                                                                                                            229 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 270
                                                                                                                     42
                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                   .
0
                                     100.0%; Score 225; DB 7;
100.0%; Pred. No. 1.9e-20;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aziz N, Gish KC, Hevezi PA, Mack DH,
                                                                                                                                                                                                                                                                                                                                                                                    Human cancer related protein SEQ ID NO:239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 12; Page 742; 767pp; English.
                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                             ABR58582 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001US-0323469P.
20-SEP-2001; 2001US-0323887P.
13-NOV-2001; 2001US-0350666P.
08-FEB-2002; 2002US-0355145P.
08-FEB-2002; 2002US-0355257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-US029560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0372246P
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                          Best Local Similarity 100.
Matches 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-354600/33.
Sequence 339 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ACC72709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003025138-A2
                                                                                                                                                                                                                                                                                                                                            09-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zlotnik A;
                                                                                                                                                                                                                                                                                                     ABR58582;
                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Afar
                                                                                                                                                                                                                     RESULT 8
ABR58582
                                                                                                                       ઠે
                                                                                                                                                        셤
```

aB

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with conserved IgV and mucin domains. The locus comprising the TIM family is genetically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants associated with protection against these responses. T cells express TIM protecting, which critically regulate CD4 T cell differentiation. This cells preferentially express TIM-1. TIM polypeptides and polymuchectides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid comprising a mammalian T cell Immunoglobulin domain and Mucin domain gene sequences, useful for treating cancer or asthma, allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                    T cell immunoglobulin domain; mucin domain; TIM, TIM-1; TIM-2; TIM-3; TIM-4; immunoglobulin chon; chromosome 5; malignancy; allergy; eczema; myelodygplastic gyndrome; alrway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kuchroo V;
                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 225; DB 6; Length 359; 100.0%; Pred. No. 2e-20; Live 0; Mismatches 0; Indels (
                                                 DB 6; Length 359;
                                                                                  Indela
                                                                                                                                          249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freeman GJ,
                                        100.0%; Score 22=;
100.0%; Pred. No. 2e-20;
rive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                    Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                           ABP70439 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10; Page 82; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mcintire JJ, Dekruyff RH,
                             Query Match
Best Local Similarity luv...
Best Local 42; Conservative
                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
1es 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-210268/20.
N-PSDB; ABZ68333.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 359 AA;
                Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                 22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JAN-2003
                                                                                                                                                                                                                                                                                ABP70439;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                        RESULT 9
                                                                                                                                                                                                                              ABP70439
ž8
                                                                                                                                                                                                                                                              ò
                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
```

ဖ

셤

```
The present invention describes a method for detecting a bladder cancerassociated transcript in a cell from a patient. The method comprises contacting a biological sample from the patient with a polymucleotide that selectively hybridises to a sequence that is 80 % identical to a table of sequences (see ACC50951 to ACC51059). ACC50951 to ACC51059 cencode the human bladder cancer-associated proteins given in ABR48446 to ABR48242). Bladder cancer-associated proteins given in ABR48446 to have cytostatic activities, and can be used in antisense gene therapy and in vaccine production. The method can be used for detecting a bladder cancer-associated from a patient. The method is useful in diagnosing or treating bladder cancer and in screening for compounds that modulate bladder cancer, such as hormones or antibodies. The mucleic acid molecules from the present invention may be used in various screening and diagnostic methods, and for gene therapy, vaccine and/or antisense/inhibition applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting a bladder cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a bladder cancer-associated polynucleotide or antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; gene therapy; antibody; antigen; antigen-binding; proteolytic release; inhibitor; kidney injury molecule-1; KIM-1; renal disease; injury; renal cancer; human.
                                             Human bladder cancer associated protein sequence SEQ ID NO:64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 225; DB 6; Length 359; 100.0%; Pred. No. 2e-20; ive 0; Mismatches 0; Indels
                                                                                              Human; bladder cancer; cytostatic; gene therapy; vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249 PLYSYTTDGNDTVTESSDGLWNNOTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KIM-1 related protein, SEQ ID No 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 10; Page 252; 307pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAO26680 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                            03.AUG-2001; 2001US-0310099P.
08-NOV-2001; 2001US-03437059P.
13-NOV-2001; 2001US-0350666P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                          03-JUL-2002; 2002WO-US021338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
12-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-201532/19.
N-PSDB; ACC50985.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mack DH, Aziz N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ä
                                                                                                                                                                                            WO2003003906-A2
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAR-2003
                                                                                                                                                                                                                                            16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA026680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA026680
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is a human T cell immunoglobulin domain and mucin domain-1 (TIM-1) polypeptide. The specification describes TIM-1, TIM-2, TIM-3 and TIM-4. TIM polypeptides are cell surface molecules with faconserved IgV and mucin domains. The locus comprising the TIM family sentically associated with immune dysfunction, including asthma. The TIM gene family is located within a region of human chromosome 5 that is commonly deleted in malignancies and myelodysplastic syndrome. Variants of TIM-1 and TIM-3 are associated with susceptibility to airway hyperreactivity and allergic T cell responses, and other variants protection against these responses. T cells express TIM proteins, which critically regulate CD4 T cell differentiation. This cells preferentially express TIM-1. TIM polypeptides and polymuclocides are useful for treating cancer, asthma, allergies, eczema or autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid comprising a mammalian T cell Immunoglobulin domain and a domain gene sequences, useful for treating cancer or asthma,
                                                                                                                                                                                                                                                                                                                 T cell immunoglobulin domain, mucin domain; TIM; TIM-1; TIM-2; TIM-3; TIM-4; immunoglobulin dysfunction; chromosome 5; malignancy; allergy; eczema; myelodygplastic gyndrome; airway hyperreactivity; cancer; asthma; allergic T cell response; autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freeman GJ, Kuchroo V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 225; DB 6; Length 359; 100.0%; Pred. No. 2e-20; Live 0; Mismatches 0; Indele
249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                 Amino acid sequence of human TIM-1 allele 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dekruyff RH, Umetsu DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mucin domain gene sequences, useful fo
allergy, eczema or autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 10; Page 80-81; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABR48174 standard; protein; 359 AA
                                                                                                                     ABP70438 standard; protein; 359 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-2002; 2002WO-US020890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JUN-2001; 2001US-0302344P.
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-210268/20.
N-PSDB; ABZ68332.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003002722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcintire JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                     22-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
                                                                                                                                                                  ABP70438;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABR48174
```

ö

Gaps

ö

Ş

RESULT 11

ð 원 ABR48174
ID ABR4
XX
AC ABR4

Starling G;

```
New polypeptide, useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing.
                                                                                                                                                                 The present invention describes an isolated human NOVX polypeptide, where X is la to 1d or 2a to 2h, or its mature form, a sequence that is at least 95 % identical to it, or a sequence comprising one or more conservative substitutions in the amino acid sequence. The NOVX polypeptide, and nucleic acid sequence encoding it, has cytostatic and antiinflammatory activities, and can be used in gene therapy, and in vaccines. The NOVX polypeptide is useful for preparing a composition for treating or preventing a pathology associated with NOVX polypeptide e.g. renal cancer or inflammation, or for tissue typing. The present sequence represents human NOV1b from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, differential expression, cancer, angiogenic disorder, fibrotic disorder, psoriasis, ischaemia; heart disease, atherosclerosis, inflammatory disease, autoimmune disease, retinal neovascularistation syndrome, scarring, uterine fibroid, detection, diagnosis, prognosis, drug screening; drug targeting, wound healing, contraception, cytostatic, cardiant, immunomodulatory; vulnerary, gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:302
                                                                                                                                                                                                                                                                                                                                                                       Score 225; DB 7; Length 359;
Pred. No. 2e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                       100.0%; Scor.
100.0%; Pred. No. 20
0; Mismatches
 Giot L,
                                                                                                                                      Claim 1; SEQ ID NO 4; 239pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADN38984 standard; protein; 359 AA
   Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001US-0332464P.
2001US-0334393P.
2001US-0335394P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-NOV-2002; 2002WO-US036810.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0347211P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-APR-2002; 2002US-0372246P.
05-JUN-2002; 2002US-0386614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0340376P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0347349P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0355250P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0356714P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0359077P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0368809P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0370110P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.
Matches 42; Conservative
 Ooi CE, Anderson DW,
                              WPI; 2003-876927/81.
                                              N-PSDB; ADE36593
                                                                                                                                                                                                                                                                                                                                          Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003042661-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-2001;
29-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JAN-2002;
08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADN38984
ID ADN3
XX
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel antibody, antibody derivative or antigen baining polypeptide that inhibits proteclytic release of a soluble kidney injury molecule-1 (KIM-1) polypeptide from KIM-1-expressing cells. The antibody, antibody derivative or antigen-binding polypeptide is useful for treating or preventing renal disease or injury, e.g. renal cancer. The antibody is also useful for inhibiting shedding of the KIM-1 polypeptide. This sequence represents a protein relating to the KIM-1 protein of the invention
                                                                                                                                                                                                                                                                                         New antibody, antibody derivative or antigen-binding polypeptide that inhibits proteolytic release of a soluble kidney injury molecule-1 polypeptide, useful for treating or preventing renal disease or injury,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Smithson G, Mesri M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; NOVX; cytostatic; antiinflammatory; gene therapy; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 100.0%; Score 225; DB 6; Similarity 100.0%; Pred. No. 2e-20; 42; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tse K, Rastelli L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      renal cancer; inflammation; tissue typing
                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 40-41; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human NOV1b protein SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE36594 standard; protein; 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-MAR-2002; 2002US-0365491P.
13-SEP-2002; 2002US-0410618P.
                                                                                                         31-MAY-2002; 2002WO-US017402
                                                                                                                                      01-JUN-2001; 2001US-0295449P
04-JUN-2001; 2001US-0295907P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-MAR-2003; 2003WO-US008490
                                                                                                                                                                                  (BIOJ ) BIOGEN INC.
(GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                  Bonventre J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lepley DM, Rieger DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                              WPI; 2003-156845/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                         e.g. renal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 359 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003080856-A2
                                            WO200298920-A1.
                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-2004
                                                                           12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-OCT-2003,
                                                                                                                                                                                                                               Bailly V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE36594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
```

ö

Gaps

ö

Indels

ö

/note= "C-terminal region unique to this splice variant"

/note= "Transmembrane domain" 324. .359

286. .288 /note= "N-glycosylated" ?90. .311

ω

```
Glynne R, Hevezi PA;
E, Zlotnik A;
                                                                                                                                                                                                                                                 sequence represents a polypeptide of the invention.
                                               Gish KC, Gl
Wilson KE,
                                                                                                                     Claim 12; SEQ ID NO 302; 1385pp; English.
                                               D, Aziz N, Ginsburg WM,
DH, Murray R, Watson SR,
                                 (EOSB-) EOS BIOTECHNOLOGY INC
     22-JUL-2002; 2002US-0397775F.
22-JUL-2002; 2002US-0397845F.
09-SEP-2002; 2002US-0409450P.
2002US-0396839P
                                                                     2003-468649/44.
                                                                           N-PSDB; ADN38983
                                                                                                                                                                                                                                                               Sequence 359 AA;
                                                Afar
                                                       Mack
```

```
Gaps
                                              .
0
Match 100.0%; Score 225; DB 7; Length 359; Local Similarity 100.0%; Pred. No. 2e-20; les 42; Conservative 0; Mismatches 0; Indels 0
                                                                                                                 249 PLYSYTTBGNDTVTESSBGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                        1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
    Query Match
                                                Matches
                                                                                                                                    셤
```

ö

Human kidney injury molecule-1 (KIM-1). ADQ76690 standard; protein; 359 AA 16-DEC-2004 (first entry) ADQ76690;

Human; KIM-1; kidney injury module-1; immunosuppressive; protozoacide; muscular-gen.; neuroprotective; antianaemic; antithyroid; haemostatic; antiallergic; antiinflammatory; vasotropic; nephtropic. Homo sapiens

```
258. .260 /
/note= "N-glycosylated"
272. .274
             1. .20
/label= Signal_peptide
65. .67
/note= "N-glycosylated"
                                                                                                                    note= "N-glycosylated"
Socation/Qualifiers
                                          Modified-site
                                                                        Modified-site
                                                                                                     Modified-site
               Peptide
```

ö

Gaps

ö

0; Indels

0; Mismatches

Query Match 100. Best Local Similarity 100. Matches 42; Conservative

Sequence 359 AA;

1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42

à

100.0%; Score 225; DB 8; Length 359; 100.0%; Pred. No. 2e-20;

```
Use of a kidney injury molecule-1 (KIM-1) antagonist for e.g. treating Th2 cell-mediated diseases or inflammatory diseases, inhibiting B cell activation, or inhibiting production of a subset of antibodies against
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 1; 68pp; English.
                                                                                                                                                                                               29-DEC-2003; 2003WO-US041294.
                                                                                                                                                                                                                                30-DEC-2002; 2002US-0436934P.
                                                                                                                                                                                                                                                                  (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                             one or more antigens.
                                                                                                                                                                                                                                                                                                                                      WPI; 2004-534277/51.
                                                                                                                           WO2004060041-A2
Modified-site
                                                                                                                                                            22-JUL-2004.
                                                                                                                                                                                                                                                                                                     Rennert PD;
                                      Domain
                                                                        Region
   whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention are by detecting a polypeptide of the invention. The invention or by detecting a polypeptide of the invention. The nucleic acid of the invention, antibodies which specifically bind a polypeptide of the invention; antibodies for drug targeting; and methods of screening for medulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, antibodies and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present
                                                                                                                                                                                                                              Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                      The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
```

```
The present sequence is that of human kidney injury molecule-1 (KIM-1), a type I cell membrane glycoprotein and member of the T cell immunoglobulin (IG) and mucin domain (TIM) family. This protein has 334 amino acids ADO76696 or 359 amino acids, depending on splice variation. It has been discovered that treatment of a mammal with a KIM-1 antagonist alters the interaction of T cells and other immune system cells, e.g. dendritic cells, monocytes, macrophages and B cells, and thereby strongly controlly monocytes, macrophages and B cells, and thereby strongly controlly by memory B cells in response to subsequent challenge with the antigen. Blockage of the binding of KIM-1 to its receptor. The reduces secretion of interferon-gamma by immune cells engaged in an antigen response in the mixed lymphocyte response assay. Based on these discoveries, the invention provides methods for therapeutically conting immune system. A method is claimed for inhibiting cell, in a mammalian immune system. A method is claimed for inhibiting signalling between a T cell and a second cell, e.g. an antigen-presenting signalling between a T cell and a second cell, e.g. an antigen-presenting cell, in a mammal. The method involves identifying a mammal with an antigentary and administering a KIM-1 glomain, and lacking a transmembrane domain and a comprising: a KIM-1 ig domain, an anti-KIM-1 antigonist, especially a polypeptide comprising a KIM-1 antigonist, especially a polypeptide comprising a mathi-KIM-1 antigonist, especially a polypeptide comprise of an anti-KIM-1 antigonist, especially a polypeptide soluble polypeptide, which can include a KIM-1 mucin domain in addition contexty. The antagonist may be conjugated to a polymer such as an FC controlling activation of a B cell in a memmal; inhibiting desense relapsee. Inhibiting activation of a B cell in a memmal in antichimmune disease relapsee.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease; treating a Th2 cell-mediated disease (e.g. myasthenia gravis, autoimmune haemolytic ransemia, Chagas disease, Grave's disease, idiopathic thrombocytopenia purpura, Wegener's granulomatosis, polyarteritis nodos, rapidly progressive crescentic glomerulonephritis, graft-versus-host disease, or systemic lupus nephritis) or inflammatory disease or disorder (e.g. inflammatory bowel diseases such as Crobn's disease, ulcerative collits, and lleitis); and inhibiting secretion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         in an autoimmune disease; inhibiting epitope spreading in an autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IFN-gamma by lymphocytes.
```

249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290

Search completed: June 29, 2005, 09:09:07 Job time: 30.8703 secs

THIS PAGE BLANK USPION

Sequence 18758, A Sequence 194, App.

Sequence Sequence Sequence

Sequence Sequence Sequence

App App App App App App App App

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence 242, Sequence 168, Sequence 251, Sequence 177,

Run on:

```
Henry Wei
Richard L. Cate
IIILE OF INVENTION: MODULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: <UNKNOWN>
            US-08-467-602-194
US-08-411-295F-318
US-08-411-295F-327
US-09-248-796A-25339
US-08-467-602-239
US-08-411-295F-165
US-08-411-295F-160
US-08-411-295F-160
US-08-411-295F-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 225; DB 4;
Pred. No. 2.8e-22;
                                                                                                                                                                         US-08-411-295F-171
US-08-467-602-242
US-08-411-295F-168
                                                                                                                                               -08-411-295F-174
-08-467-602-245
                                                                                                                                                                                                                US-08-467-602-251
US-08-411-295F-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-MAY-1996
ATTORNEY/AGENT INFORMATION:
NAME: Levine, Leslie M.
REGISTRATION NUMBER: 35,245
REPERBACE/DOCKET NUMBER: 30,245
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 679-2810
TELEPHONE: (617) 679-2810
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-197-970B-7
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                            Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/09197970B Patent No. 6664385 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 334 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
US-09-197-970B-7
 RESULT 1
Sequence 7, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 2, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 13, Appli
Sequence 10, Spli
Patent No. 5260223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 217, App
Sequence 411, App
Sequence 191, App
Sequence 315, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3159, Ap
Sequence 44, Appl
Sequence 217, App
                                                                                                     (without alignments)
542.805 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 186,
Sequence 310,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 324,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 197,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 321,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                        June 29, 2005, 08:57:16 ; Search time 5.77603 Seconds
                                                                                                                                        US-10-718-321-6_COPY_40_81
225
1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence
                                                                                                                                                                                                                                                                                                                                                                                                      /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
           GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-197-970B-7

US-08-287-001A-2

US-08-168-091A-2

US-08-428-926-5

US-08-428-926-5

US-08-428-928-5

US-08-428-928-5

US-08-428-928-1

US-09-939-517-5

US-09-939-258-13

US-09-197-970B-3

SZ60223-4

SZ60223-4

US-09-137-970B-3

SZ60223-4

US-09-134-0108-44

US-08-470-335-217

US-08-470-335-217

US-08-470-602-191

US-08-467-602-191

US-08-411-295F-316

US-08-411-295F-316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-411-295F-310
US-08-467-602-200
US-08-411-295F-324
US-08-467-602-197
US-08-411-295F-321
                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                        513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                            OM protein - protein search, using sw model
                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                         Issued_Patents_AA:*
                                                                                                                                                                                                                                                                                            Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       451
602
602
602
602
602
602
602
1070
1070
333
323
10182
190
190
                                                                                                                                                                                                                                                                                                                                                                                                                     .......
                                                                                                                                                          Perfect score:
                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database :
                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                        Searched:
```

Result Š Length 334;

```
Query Match 79.1
Best Local Similarity 81.0
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; MOLECULE TYPE: protein PCT-US95-09941-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Bost
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
    Gaps
    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                     Sequence 2, Application US/08287001A
Patent No. 5622861
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: KAPLAN, GERARDO
APPLICANT: FINSTONE, STEPHEN M.
TITLE OF INVENTION: HEPATITIS A VIRUS RECEPTOR AND METHODS
TITLE OF INVENTION: OF USE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSER: NEEDLE & ROSENBERG, P.C.
STREET: Suite 1200, The Candler Bldg, 127 Peachtree
STREET: Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEPATITIS A VIRUS RECEPTOR AND METHODS
OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79.1%; Score 178; DB 1; Length 451;
81.0%; Pred. No. 8.8e-16;
trive 2; Mismatches 6; Indels
0; Indels
                                                               249 PLYSYTTDGNDTVTESSDGLWNNNOTOLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PLYSYTTDGSDTVTESSDGLWNNNQTQLSPEHSPQMVNTTEG 370
                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: HEPATITIS A VIRUS RECEPTOR AND MET
TITLE OF INVENTION: OF USE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: NEEDLE & ROSENBERG, P.C.
STREET: Suite 1200, The Candler Bldg, 127 Peachtree
STREET: Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: FIDEPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/287,001A
FILING DATE:
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Spratt, Gwedolyn D.
REGISTATION NUMBER: 36,016
REFERENCE/DOCKET NUMBER: 1414.621
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCT-US95-09941-2; Sequence 2, Application PC/TUS9509941; GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 404/688-9880
INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 451 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 81.04
Matches 34; Conservative
42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , MOLECULE TYPE: protein US-08-287-001A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Atlanta
STATE: Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Atlanta
STATE: Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                     RESULT 2
US-08-287-001A-2
  Matches
                                                                         쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
WERNITH TTER. PLORDY disk

WENTING FERRIS. IN THE COMPACINE

OCNETINE IN THE COMPACINE

OCNETINE PROPERTY FELLOW DISK.

ONTING WITHOUT THE PROPERTY FELLOW DISK.

CHASTICATION DATE: A MILE OF 1994

ATTOMACY ARMY NORBER: PC7/085/0941

PRICE PROPERTY AND WINER: PC7/085/0941

ATTOMACY ARMY NORBER: PC7/085/0941

ATTOMACY ARMY NORBER: PC7/085/0941

ATTOMACY ARMY NORBER: PC7/085/0941

ATTOMACY ARMY NORBER: PC7/085/0941

TELEPHONE: A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A MILE A
```

ö

```
94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-428-298-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5, Application US/08428926

Patent No. 5667780

GENERAL INFORMATION:
PAPLICANT: Ho, Wei-Hsien

TITLE OF INVENTION: SENSORY AND WOTOR NEURON DERIVED FACTOR (SMDF)

NUMBER OF SEQUENCES: 5

CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STREET: California
COUNTRY: USA

ZIP: 94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5,
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 26.7%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 10; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 26.7%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 10; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |: || : |||: ||: |: |: |: || |: || |: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 YTSTTHHSMTVTQTPSHSWSNGHTESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READBLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,926
FLING DATE: 25-APR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/339517
FILING DATE: 14-NOV-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 853D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/255-1994
TELEFAX: 415/952-9881
TELEFAX: 910/31-7168
INFORMATION FOR SEQ. ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application US/08428927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Lee, Wendy M. REGISTRATION NUMBER: 00,000
                                                                                                                                  LENGTH: 602 amino acids
ryPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-168-091A-2
TELEFAX: (617) 227-5941 INFORMATION FOR SEQ ID NO:
                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
US-08-428-926-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
US-08-428-927-5
                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-428-926-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Ho, Wei-Haien
APPLICANT: Obheroff, Phyllis L.
TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
; Patent No. 5756456
; GENERAL INFORMATION:
APPLICANT: Ho, Wei-Heien
; APPLICANT: Osheroff, Phyllis L.
TITLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF);
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 26.7%; Score 60; DB 1; Length 602; Best Local Similarity 31.7%; Pred. No. 10; Matches 13; Conservative 11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 YTSTTHHSMTVTQTPSHSWSNGHTESILSESHSVLVSSSVE 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk COMPUTER: 18M PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFFWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,927
FILING DATE: 25-APR-1995
CLASSIFICATION AND AND AND AND APPLICATION NUMBER: 08/339517
FILING DATE: 14-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 853D3
TELECOMMUNICATION INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 853D3
TELECOMMUNICATION INFORMATION:
TELEBHONE: 415/225-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,298
FILLING DATE: 25-APR-1995
                                                                                                                                                                                ADDRESSEE: Geneartech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/08428298
Patent No. 5763213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          415/952-9881
                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: 5.25 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
```

ij,

Gaps

5

```
Sequence 2, Application US/08697954

Batent No. 62845335

GENERAL INFORMATION:
APPLICANT: Role, Lorna W.
TITLE OF INVENTION: SPLICE VARIANTS OF THE HEREGULIN GENE, DARIA, AND TITLE OF INVENTION: USES THEREOF NUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Haberhauer, Gregor
APPLICANT: Lee, Heung-Shick
APPLICANT: Lee, Heung-Shick
APPLICANT: Lie, Hyung-Joon
TITLE OF INVENTION: CORYNEACTERIUM GLUTAMICUM GENES ENCODING STRESS,
TITLE OF INVENTION: RESISTANCE AND TOLERANCE PROTEINS
FILE REFERENCE: BGI-124CP
CURRENT APPLICATION NUMBER: US/09/603,208A
CURRENT FILING DATE: 2000-06-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 26.7%; Score 60; DB 4; Length 606; Best Local Similarity 34.1%; Pred. No. 10; Matches 14; Conservative 4; Mismatches 23; Indels
15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    559 PLVEYOKEGGDMFNGMKDGIKEETVRQLFLSASSSSSKTRK 599
                                                                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTK 41
                                                       3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/151214

PRIOR FILING DATE: 1999-08-27

PRIOR FILING DATE: 1999-08-27

PRIOR FILING DATE: 1999-07-01

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-08

PRIOR PILING DATE: 1999-07-09

PRIOR PILING DATE: 1999-07-09

PRIOR PILING DATE: 1999-07-09

PRIOR PILING DATE: 1999-07-09

PRIOR PILING DATE: 1999-07-09

PRIOR PILING DATE: 1999-07-14

PRIOR PILING DATE: 1999-07-14

PRIOR PILING DATE: 1999-07-14

PRIOR PILING DATE: 1999-07-14

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17

PRIOR PILING DATE: 1999-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Corynebacterium glutamicum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 60/142692
PRIOR FILING DATE: 1999-07-01
PRIOR APPLICATION NUMBER: 60/151214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-06-23
BER: 60/141031
                                                                                                                                                                                                                                       Sequence 56, Application US/09603208A Patent No. 6822084
                                                                                                                                                                                                                                                                                                                                               Kroger, Burkhard
Schroder, Hartwig
Zelder, Oskar
                                                                                                                                                                                                                                                                                                                              Pompejus, Markus
  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1999-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , ORGANISM: Cor
US-09-603-208A-56
                                                                                                                                                                                                                    US-09-603-208A-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-697-954-2
     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Ho, Wei-Heien
APPLICANT: Ho, Wei-Heien
APPLICANT: Osheroff, Phyllis L.
TILLE OF INVENTION: SENSORY AND MOTOR NEURON DERIVED FACTOR (SMDF)
NUMBER OF SEQUENCES:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 60; DB 1; Length 602; Pred. No. 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patin (Genentech)
CURRENY APPLICATION DATA:
APPLICATION NUMBER: US/08/339,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 60; DB 1
; Pred. No. 10;
11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 14-NOV-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING NAME
CLASSIFICATION: 435
PRIOR APPLICATION DATA.
PPLICATION NUMBER: 08/339517
FILING DATE: 14-NOV-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application US/08339517
Patent No. 5770567
                                                                                                                                   NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 953
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
ATTORDEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 85
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 31.7%;
Matches 13; Conservative 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELERAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                              TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                TELEPHONE: 415/225-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: 5.25 in
                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-428-298-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

ö

Gaps

;

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: BRENNER, MICHAEL B.;STROMINGER, JACK L.;SEIDMAN, JOHN G.;IP, STEPHEN H.; KRANGEL, MICHAEL S.
TITLE OF INVENTION: METHODS FOR DETECTION OF HUMAN GAMMA;T CELL RECEPPOR
25.8%; Score 58; DB 4; Length 981; 47.6%; Pred. No. 34; ive 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25.3%; Score 57; DB 4; Length 307; 45.0%; Pred. No. 11;
                                                                                                                                                                                                                                                                                                                                                                                                               Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Blogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: INP. PC Compatible
COMPUTER: INP. PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/197,970B
FILING DATE: 23-No. 6664385-1998
CLASSIFICATION: CUNCHOWN:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/018,228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199 SYTPADWNGTVT-SSEEAWNNHTVRIPLRKP--QRNPTKG 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 SYT-TDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Levine, Leslie M.
RRGISTRATION NUMBER: 35,245
REFERENCE/DOCKET NUMBER: A010 PCT CIP
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Mismatches
                                                                                                                                                                                                   RESUD: 14
US-09-197-970B-3
i Sequence 3, Application US/09197970B
j Patent No. 6664385
j GENERAL INFORMATION:
APPLICANT: Michele Sanicola-Nadel
j Joseph V. Bonventre
Takaharu Ichimura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-197-970B-3
                                                                                                                    :| || || || || || 484 ETTWESLDHLWNNNQQMFWIQ 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Floppy disk
                                                                                       11 DTVTESSDGLWNNNQTQLFLE 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 24-MAY-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 307 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02142
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity 45.0
Matches 18; Conservative
                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                           Henry Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (617)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                        Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Patent No. 5260223
      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
5260223-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                           à
                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: SWARBLOOM, Rohald
TITLE OF INVENTION: ALPHAVIRUS VECTORS AND VIROSOMES WITH MODIFIED HIV GENES FOR USE
TITLE OF INVENTION: VACCINES
FILE REPERENCE: 01113.0001U3
CURRENT APPLICATION NUMBER: US/09/991,258
CURRENT FILING DATE: 2001-11-16
PRIOR FILING DATE: 2001-07-09
PRIOR FILING DATE: 2000-07-07
PRIOR FILING DATE: 2000-07-07
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PRESERVE FOR Windows Version 4.0
SEQ ID NO 13
LENGTH: 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence; No. 6783939e = ; OTHER INFORMATION: synthetic construct
US-09-991-258-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Score 60; DB 3; Length 1070;
; Pred. No. 20;
11; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 YSYTTDGNDTVTESSDGLWNNNQTQLFL--EHSLLTANTTK 41
                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/697,954
                        3E: Cooper & Dunham LLP
1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-991-258-13
; Sequence 13, Application US/09991258
; Patent No. 6783939
                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFRENCE/DOCKET NUMBER: 4683:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 212-391-0526
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 26.7%;
Best Local Similarity 31.7%;
Matches 13; Conservative 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dryga, Sergey
Caley, Ian
Maughan, Maureen
Johnston, Robert
Davis, Nancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1070 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Olmsted, Robert
                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Keith, Paula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                   STATE: New York COUNTRY: U.S.A. ZIP: 10036
                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-697-954-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
```

δ 셤

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3159, Application US/09134001C
Patent No. 6380370
GENERAL INFORMATION:
GENERAL INFORMATION:
TTPLICANT: Lynn Doucette-Stamm et al
TTPLICANT: Lynn Doucette-Stamm et al
TTPLICANT: Lynn Doucette-Stamm et al
TTPLICANT: Lynn Doucette-Stamm et al
TTPLIC OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
TTTLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TTTLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TTTLE OF INVENTION WUMBER: US 60/064,964
FRIOR APPLICATION NUMBER: US 60/064,964
FRIOR FILING DATE: 1997-11-08
FRIOR FILING DATE: 1997-11-08
FRIOR FILING DATE: 1997-08-14
SEQ ID NOS: 5674
LENGTH: 10182
                                                                                                                                                                                                                                                                                                                                                                                                                                ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                ٠.
ن
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ښ
ښ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT BRENNER, MICHAEL B.;STROMINGER, JACK L.;SEIDMAN,
JOHN G.;IP, STEPHEN H.; KRANGEL, MICHAEL S.
TITLE OF INVENTION: METHODS FOR DETECTION OF HUMAN GAMMA
TITLE RECEPTOR
NUMBER OF SEQUENCES: 4
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/187,698
FILING DATE: 29-APR-1988
FILING DATE: 29-APR-1987
FILING DATE: 19-F187
FILING DATE: 19-F187
FILING DATE: 19-F187
FILING DATE: 19-F187
FILING DATE: 19-F1886
FILING DATE: 19-F1886
FILING DATE: 19-F1886
FILING DATE: 19-F1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 54.5; DB 6; Length 323; Pred. No. 26; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                           Query Match 24.2%; Score 54.5; DB 6; Length 323; Best Local Similarity 30.0%; Pred. No. 26; Matches 12; Conservative 6; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251 PKYNYSKDANDVITMDPKDNWSKDANDTLL---LQLTNTS 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTT
NUMBER OF SEQUENCES: 4
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/187,698
FILING DATE: 29-APR-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 115,256
FILING DATE: 29-OCT-1987
APPLICATION NUMBER: 16,252
FILING DATE: 19-FEB-1987
APPLICATION NUMBER: 882,100
FILING DATE: 03-JUL-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
5260223-4
;Patent No. 5260223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-134-001C-3159
                                                                                                                                                                                                                                                                               ;SEQ ID NO:4:
; LENGTH: 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO:4:
                                                                                                                                                                                                                                                                                                                             5260223-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5260223-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

Sequence

Sequence 25, Appl Sequence 21, Appl Sequence 21, Appl Sequence 23, Appl Sequence 23, Appl Sequence 27, Appl Sequence 27, Appl Sequence 37, Appl Sequence 39, Appl Sequence 39, Appl Sequence 11, Appl Sequence 11, Appl Sequence 28, Appl Sequence 28, Appl Sequence 28, Appl Sequence 28, Appl Sequence 28, Appl Sequence 28, Appl

Sequence 13, Appl Sequence 13, Appl Sequence 9518, Appli Sequence 9518, Ap

Sequence 9519, Ap Sequence 59054, A Sequence 196644, Sequence 14, Appl Sequence 127039,

```
Wed Jun 29 15:40:44 2005
```

Sequence:

Run on:

Searched:

Database

```
Query Match 100.0%; Score 225; DB 17; Length 81; Best Local Similarity 100.0%; Pred. No. 1e-22; Matches 42; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-718-321-6

Sequence 6, Application US/10718321

Publication No. US20550112117A1

SEGUENTAL INFORMATION NO. US20550112117A1

APPLICANT: Biogen Idec Ma Inc.

APPLICANT: Bailly, Veronique

APPLICANT: Ballly, Veronique

APPLICANT: The General Hospital Corporation

TITLE OF INVENTION: Molecules and Methods for Inhibiting

TITLE OF INVENTION: Shedding of KIM-1

FILE REFERENCE: A124 US

CURRENT APPLICATION NUMBER: US/10/718,321

CURRENT PAPLICATION NUMBER: 60/29549

PRIOR FILING DATE: 2001-06-01

PRIOR PILING DATE: 2001-06-04

PRIOR FILING DATE: 2001-06-04

PRIOR FILING DATE: 2001-06-04

PRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04

SPRIOR FILING DATE: 2001-06-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
US-10-369-493-19944
US-10-424-599-220078
US-10-408-765A-1975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo Sapiens
   US-10-718-321-6
   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19, Appl
Sequence 302, App
                                                                                                                    June 29, 2005, 08:58:20 ; Search time 26.3222 Seconds (without alignments) 613.589 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 28,
Sequence 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGL......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PUDLIBRICA APPLICATIONS AND TO THE COME. PDB.*

(GGNZ_6/ptodata///pubpaa/US6/PWEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US66/PWEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US66/PWEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US67/PWEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US67/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US68/PWEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US68/PWEW_PUB.pep.*)

(GGNZ_6/ptodata///pubpaa/US98/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US98/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US98/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US98/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US98/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US99/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US108/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US11/NEW_PUB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*

(GGNZ_6/ptodata///pubpaa/US10/PUBCOMB.pep.*
                     5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-718-321-6
US-10-65-506-7
US-10-118-311-7
US-10-391-939A-28
US-10-391-939A-28
US-10-188-012-17
US-10-188-012-19
US-10-295-027-302
US-10-188-832-64
US-10-391-939A-4
US-10-663-497-17
                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                 1717557 seqs, 384547976 residues
                     version :
- 2005 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published_Applications_AA:*
                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                          US-10-718-321-6_COPY_40_81
225
                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                   GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117
117
118
118
118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
3334
3350
350
350
350
350
350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.001
                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
```

Sequence 514, Appl Sequence 21, Appl Sequence 19944, A Sequence 220078, Sequence 1975, Ap

Sequence 37036,

ö

Gaps

ö

Result Š

Wed Jun 29 15:40:44 2005

```
APPLICANT: Anderson, David W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
US-10-391-939A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-391-939A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-391-939A-2
                                                                                                                                                                                                                                                                  LENGTH: 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 334;
                                                                                                                                                                                                                                                       Henry Wei
Richard L. Cate
TITLE OF INVENTION: MODULATORS OF TISSUE REGENERATION
NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
COUNTRY: USA
ZIP: 02142
COMPUTER: RADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM
OF SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/10718121
Publication No. US2005011217A1
GENERAL INPORMATION:
APPLICANT: Baigen Idec Ma Inc.
APPLICANT: Bailly, Veronique
APPLICANT: Bailly, Veronique
APPLICANT: Beneral Hospital Corporation
TITLE OF INVENTION: Molecules and Methods for Inhibiting
TITLE OF INVENTION: Shedding of KIM-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
40 PLYSYTIDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 225; DB 17; Best Local Similarity 100.0%; Pred. No. 5.6e-22; Matches 42; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: A010 PCT CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 679-2810
TELEFAX: (617) 679-2838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/655,506
FILING DATE: 04-58p-2003
CLASSIFICATION DATA:
APPLICATION NUMBER: US/09/197,970
FILING DATE: 23-Nov-1998
APPLICATION NUMBER: US 60/018,228
FILING DATE: 24-NAY-1996
ATTORNEY/AGENT INFORMATION:
NAME: Levine, Lealie M.
REGISTRATION NUMBER: 35,248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-655-506-7
                                                                                                         Sequence 7, Application US/10655506; Publication No. US20050089868A1; GENERAL INFORMATION: APPLICANT: Michele Sanicola-Nadel
                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Biogen, Inc.
STREET: 14 Cambridge Center
CITY: Cambridge
                                                                                                                                                                                                  Joseph V. Bonventre
Catherine A. Hession
Takaharu Ichimura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 334 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MA
                                                                                    US-10-655-506-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-718-321-7
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
GENERAL INCORMATION:

APPLICANT: Anderson, David W.;

APPLICANT: Giot, Loic;

APPLICANT: Giot, Loic;

APPLICANT: Giot, Loic;

APPLICANT: Giot, Loic;

APPLICANT: Giot, Loic;

APPLICANT: Giot, Loic;

APPLICANT: Rest., Mend;

APPLICANT: Rest., Loica;

APPLICANT: Smithson, Glennda;

APPLICANT: Smithson, Glennda;

APPLICANT: Smithson, Glennda;

APPLICANT: Smithson, Glennda;

APPLICANT: Stating, Gary;

APPLICANT: Stating, Gary;

APPLICANT: Stating, Gary;

APPLICANT: Stating, Gary;

APPLICANT: Stating, Gary;

APPLICANT: Stating, Gary;

APPLICANT: APPLICATION NUMBER: GO/365,491

PRIOR APPLICATION NUMBER: GO/365,491

PRIOR APPLICATION NUMBER: GO/310,618

PRIOR APPLICATION NUMBER: GO/310,618

PRIOR PILING DATE: 2002-09-13

NUMBER OF SEQ ID NOS: 39

SOFTWARE: CuraSequist version 0.1

SEQ ID NO 2

LENGTH: 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%; Score 225; DB 17; Length 339; I Similarity 100.0%; Pred. No. 5.7e-22; 42; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 334;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        229 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 225; DB 17; 100.0%; Pred. No. 5.6e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
CURRENT APPLICATION NUMBER: US/10/718,321
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/29549
PRIOR FILING DATE: 2001-06-01
PRIOR PILING DATE: 2001-06-04
PRIOR PLING DATE: 2001-06-04
PRIOR PLING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
SPRIOR FILING DATE: 2002-05-31
NUMBER: OF SEQ ID NOS: 8
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 28, Application US/10391939A
; Publication No. US20050014687A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/10391939A
Publication No. US20050014687A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-718-321-7
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 42; Conserv
```

```
APPLICANT: Marray, Richard
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
FILE REFERENCE: 018501-012500US
CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-11-15
PRIOR FILING DATE: 2001-11-15
PRIOR PELICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/334,393
PRIOR APPLICATION NUMBER: US 60/340,376
PRIOR PELLING DATE: 2001-11-21
PRIOR PELLING DATE: 2001-11-21
PRIOR PELLING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/340,376
PRIOR PELLING DATE: 2001-11-21
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
PRIOR PELLING DATE: 2001-12-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 359;
                                                                                                                                                                  APPLICANT: Umetsu, Dale T.
APPLICANT: Umetsu, Dale T.
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Kuchroo, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: Use Thereof
TITLE OF INVENTION: Use Thereof
FILE REPERENCE: STAN-235
CURRENT PILITED DATE: 2002-07-01
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR PLILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SOUTHWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 19
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 225; DB 14; 100.0%; Pred. No. 6.2e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 60/347,349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 302, Application US/10295027
Publication No. US20030232350A1
GENERAL INFORMATION:
                                                       Sequence 19, Application US/10188012
Publication No. US20030124114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: (1)...(359)
; OTHER INFORMATION: TIM-1, allele 2
US-10-188-012-19
                                                                                                                                           APPLICANT: McIntire, Jennifer Jones APPLICANT: Umetsu, Dale T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Afar, Daniel
APPLICANT: Aziz, Natasha
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Ginsh, Kurt C.
APPLICANT: Glynne, Richard
APPLICANT: Hevezi, Peter A.
APPLICANT: Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.
Best Local Similarity 100.
Matches 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-295-027-302
RESULT 7
US-10-188-012-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                           TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLBIC ACIDS ENCODING SAME, AND METHOD FILE REFERENCE: 21402-048
CURRENT APPLICATION NUMBER: US/10/391,939A
CURRENT APPLICATION NUMBER: 60/365,491
PRIOR PILING DATE: 2002-03-19
PRIOR PILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE CURRENT FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 225; DB 17; Length 339; Best Local Similarity 100.0%; Pred. No. 5.7e-22; Matches 42; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 100.0%; Score 225; DB 14; Length 359; I Similarity 100.0%; Pred. No. 6.2e-22; 42; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: McIntie, Jennifer Jones
APPLICANT: Umetsu, Dale T.
APPLICANT: Dekruyff, Rosemarie
APPLICANT: Kuchroo, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: US/10/188,012
CURRENT FILING DATE: 2002-07-01
PRIOR APPLICATION NUMBER: 60/302,344
PRIOR FILING DATE: 2001-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              229 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17, Application US/10188012
Publication No. US20030124114A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (1)...(360)
; OTHER INFORMATION: TIM-1 allele 1
US-10-188-012-17
                                                                                                                                                                                                  Smithson, Glennda;
Starling, Gary;
     Giot, Loic ;
Guo, Xiaojia Sasha;
                                                               Lepley, Denise M.,
                                                                                                              Ooi, Chean Eng;
Rastelli, Luca;
Rieger, Daniel K.
                                                                                                                                                                                                                                                            Tse, Kam-Fai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-391-939A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-10-188-012-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
```

ઠ 셤 ઠ 셤

ö

Mesri, Mehdi

```
US-10-663-497-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Mack, David H.

APPLICANT: Mack, David H.

APPLICANT: Mack, David H.

APPLICANT: Aziz, Natasha

APPLICANT: Bos Biotechnology, Inc.

TITLE OF INVENTION: Methods of Diagnosis of Bladder Cancer, Compositions

TITLE OF INVENTION: and Methods of Screening for Modulators of Bladder

TITLE OF INVENTION: Cancer:

TITLE OF INVENTION: Cancer:

FILE REFERENCE: 018501-002330WS

CURRENT APPLICATION NUMBER: US 60/302,814

PRIOR FILING DATE: 2001-07-03

PRIOR FILING DATE: 2001-07-03

PRIOR FILING DATE: 2001-10-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
PRIOR FILING DATE: 2002-01-10
PRIOR APPLICATION NUMBER: US 60/355,250
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-02-03
PRIOR FILING DATE: 2002-02-03
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1386
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 225; DB 15; Length 359; Best Local Similarity 100.0%; Pred. No. 6.2e-22; Matches 42; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 225; DB 15; Length 359; Best Local Similarity 100.0%; Pred. No. 6.2e-22; Matches 42; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 64, Application US/10188832; Publication No. US20040076955A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/10391939A, Publication No. US20050014687A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Giot, Loic ;
Guo, Xiaojia Sasha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Anderson, David W.;
APPLICANT: Giot, Loic;
APPLICANT: Guo, Xiaojia Sasha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lepley, Denise M.;
                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-295-027-302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-188-832-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-391-939A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
APPLICANT: Smithson, Glernida;
APPLICANT: Smithson, Glernida;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
APPLICANT: Starling, Gary;
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS FILE REFERENCE: 21402-048
CURRENT APPLICATION NUMBER: US/10/391,939A
CURRENT FILING DATE: 2003-03-19
PRIOR PILING DATE: 2002-03-19
PRIOR PILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 39
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17, Application US/10663497

Sequence 17, Application US/10663497

Sequence 17, Application Wo. US2005095593A1

GENERAL INFORMATION:

APPLICANT: Dale Unetsu

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

APPLICANT: Jennifer McIntire

TITLE OF INVENTION: IMMUNE DISEASE

TITLE OF INVENTION: IMMUNE DISEASE

FILE REPRENCE: STAN-2352IP

CURRENT FILING DATE: 2003-09-15

PRIOR PILING DATE: 2003-09-15

PRIOR PILING DATE: 2001-06-29

PRIOR PILING DATE: 2001-06-20

PRIOR PILING DATE: 2001-06-20

SOFTWARE: PASTEED for Windows Version 4.0

SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 100.0%; Score 225; DB 17; Length 359; l Similarity 100.0%; Pred. No. 6.2e-22; 42; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 225; DB 17; Length 359; Best Local Similarity 100.0%; Pred. No. 6.2e-22; Matches 42; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249 PLYSYTTDGNDTVTESSDGLWNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (1)...(360)
; OTHER INFORMATION: TIM-1 allele 1
US-10-663-497-17
Ooi, Chean Eng;
Rastelli, Luca;
Rieger, Daniel K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
US-10-663-497-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-391-939A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
```

```
APPLICANT: "Journal Applicant: "Journal Applicant: Liu, Wei has a Applicant: Liu, Wei has a Applicant: Liu, Wei has a Applicant: Steve has steve; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers; FILE REPRENCE: 031896-026000 (AM101264); CURRENT PAPLICATION NUMBER: US/0/447,918; CURRENT FILING DATE: 2003-05-19; PRIOR FILING DATE: 2003-05-20; NUMBER OF SEQ ID NOS: 14937; SOFFWARE: Patentin version 3.2; Texton.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 225; DB 14; Length 364; Best Local Similarity 100.0%; Pred. No. 6.3e-22; Matches 42; Conservative 0; Mismatches 0; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Unetsu, Dale T.
APPLICANT: Unetsu, Dale T.
APPLICANT: Unetsu, Dale T.
APPLICANT: Unetsu, Dale T.
APPLICANT: Exerveff, Rosemarie
APPLICANT: Ruchroo, Vijay
APPLICANT: Ruchroo, Vijay
APPLICANT: Freeman, Gordon J.
TITLE OF INVENTION: T Cell Regulatory Genes and Methods of
TITLE OF INVENTION: Use Thereof
FILE REFERENCE: STAN-235
CURRENT APPLICATION NUMBER: 2002-07-01
FRIOR APPLICATION NUMBER: 60/302,344
PRIOR FILING DATE: 2001-06-29
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 364
TYPE: PRI
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 225; DB 17; Best Local Similarity 100.0%; Pred. No. 6.2e-22; Matches 42; Conservative 0; Mismatches 0;
                                                                              Sequence 25, Application US/10847918
Publication No. US20050119210A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 25, Application US/10188012
Publication No. US20030124114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KSY: VARIANT
CCATION: (1)...(364)
OTHER INFORMATION: TIM-1 allele 5
US-10-188-012-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 359
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-847-918-25
                                                     JS-10-847-918-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-188-012-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                 APPLICANT: Rosematic Dekruyff
APPLICANT: Rosematic Dekruyff
APPLICANT: Gerdon Freeman
TITLE OF INVENTION: T CELL REGULATORY GENES ASSOCIATED WITH
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: IMMUNE DISEASE
TITLE OF INVENTION: UMMUNE DISEASE
CURRENT APPLICATION NUMBER: US/10/663,497
PRIOR FILLING DATE: 2001-06-29
PRIOR PILLING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: 10/188,012
PRIOR FILLING DATE: 2001-06-29
PRIOR SELLING DATE: 2001-06-39
NUMBER OF SEQ ID NGS: 40
SOFTWARE: FRAESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 17; Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Ballly Veronique
APPLICANT: Bonventre, Joseph
APPLICANT: The General Hospital Corporation
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Shedding of KIM-1
TITLE OF INVENTION: Shedding of KIM-1
FILE REPERBNCE: A124 US
CURRENT APPLICATION NUMBER: US/10/718,321
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/295449
PRIOR PILING DATE: 2001-06-01
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
PRIOR FILING DATE: 2001-06-04
SROT FILING DATE: 2001-06-05
SROT DATE: 3001-06-05
SEQ ID NO 8
SEQ ID NO 8
LEASTH : 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PLYSYTTDGNDTVTESSDGLWNNNQTQLFLEHSLLTANTTKG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 225; DB 17; 100.0%; Pred. No. 6.2e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.2e-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 225; Dest Local Similarity 100.0%; Pred. No. 6.2 Matches 42; Conservative 0; Mismatches
Sequence 19, Application US/10663497
Publication No. US20050095593A1
GENERAL INFORMATION:
APPLICANT: Dale Umetsu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (1)...(359)
OTHER INFORMATION: TIM-1, allele 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 8, Application US/10718321
; Publication No. US20050112117A1
; GENERAL INFORMATION:
APPLICANT: Biogen Idec Ma Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.
Best Local Similarity 100.
Matches 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-663-497-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 19
LENGTH: 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-718-321-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
```

ö

Gaps

ö

Indels

Length 359;

Search completed: June 29, 2005, 09:33:00

ö

Gaps ö

Job time : 26.3222 secs

```
cercopithec
cercopithec
cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            homo sapien
anopheles g
dictyosteli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dictyosteli
caenorhabdi
arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         xenopus lae
mus musculu
mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        debaryomyce
homo sapien
homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               043656 homo sapien
Q96d42 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cercopithec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oryza sativ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mus musculu
mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mus musculu
mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   m mus muscu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rattus norv
                                                                                                                                                        June 29, 2005, 08:57:16; Search time 32.4637 Seconds (without alignments) 1277.688 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neurospora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                   1 MPLPRQNHEPVATSPSSPQP......NNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       071j48
071j48
071j47
076598
054947
0778490
0778490
0778490
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
077890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q6bvr2
Q9bsf5
Q8nd03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q95144
O18984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1612378
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1612378 segs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                        protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            043656
095144
018984
07JJ48
07JJ47
046598
046598
07JD90
07JPMD5
07JPMD5
098SSZ4
08SSZ28
097Z228
097Z228
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097Z70
097
                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9D4W4
Q8X0L3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9BSF5
Q8ND03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match Length DB
                                                                                                                                                                                                                                                                 US-10-718-321-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82.5
79.5
79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83
                                                                                                           ,
                                                                                                        OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     269
                                              dictyosteli
yarrowia li
felis silve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                      oryza sativ
                                                                                                      anopheles g
mus musculu
                    oryza sativ
callitrichi
                                                                          arabidopsis
plasmodium
                                                                                              mus musculu
                                                                                                                         mus musculu
           ctyostel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             210 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MPLPRONHEPVATSPSSPOPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                 Zhang Y., Kaplan G.G.;
a hepatitis A virus cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
         086ag0
0751h8
08ben8
069b50
066a80
077y839
077y839
077f33
07f51
07f61
07f61
 29u5e7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359 AA; 38704 MW; C207FEC562DC62CA CRC64;
                                                                                                                                                                                                            043656;
01-UNN-1998 (TrEMBLrel. 06, Created)
01-UNN-1998 (TrEMBLrel. 06, Last sequence update)
10-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hepatitis A virus cellular receptor 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 100.0%; Score 432; DB 2; Local Similarity 100.0%; Pred. No. 2.9e-33; es 81; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364 AA
                                                                                                                                                                                                                                                                                                                                                                   receptor.";
J. Virol. 72:6621-6628(1998).
S. Wirol. 72:6621-6628(1998).
G. GO:0004872; F:receptor activity; IEA.
InterPro; IPR003599; Ig.
InterPro; IPR003599; Ig.
InterPro; IPR003006; Ig_MHC.
SMART; SMO409; IG.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                      MEDLINE=98325180; PubMed=9658108;
Feigelstock D., Thompson P., Mattoo P.,
"The human homolog of HAVcr-1 codes for
                          Q8BEN8
Q69P50
Q86A80
Q6CGV5
Q7XS39
Q9SQQ6
Q7XX33
ABB2 MOUSE
Q7QFG1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                         OGDDDO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270 NNNQTQLFLEHSLLTANTTKG 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NNNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19,
19,
28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-DEC-2001 (TrEMBLrel. 1:
01-DEC-2001 (TrEMBLrel. 1:
25-OCT-2004 (TrEMBLrel. 2:
HAVCR1 protein.
                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
298
823
823
2819
2819
709
982
1423
338
634
760
837
888
                                                                                                                                                                                                                                                                      Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
117.2
117.2
117.2
116.9
116.9
116.8
116.8
116.8
116.8
116.8
                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                               TISSUE=Liver;
74.5
74.5
73.5
73.7
73
73
                                                                         72.5
72.5
72.5
72.5
72.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q96D42;
                                                                                                                                                                                                    043656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q96D42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
043656
                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
2 PLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 PLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=97368416; PubMed=9225030; Ashida M., Hamada C.; Ashida M., Hamada C.; Molecular cloning of the hepatitis A virus receptor from a simian cell line."; 78:1565-1569(1997).
                                                                                                                                                                         "Identification of a surface glycoprotein on African green monkey kidney cells as a receptor for hepatitis A virus."; EMBO J. 15:4282-4296(1996).
EMBL, X98252; CAA66906.1; -. PIR, S71754; S71754.
Interpro, IPR003599; Ig-like.
Interpro, IPR003006; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cercopithecus aethiops (Green monkey) (Grivet).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
                                                                                                                  Kaplan G., Totsuka A., Thompson P., Akatsuka T., Moritsugu Y., Peinstone S.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460 AA; 49687 MW; 1D1A0C1D832139EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 17 Potential.
451 AA; 48774 MW; 5D395C5455AA4332 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TrEMBLrel. 05, Last sequence update) (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80.6%; Score 348; DB 2;
82.5%; Pred. No. 4.4e-25;
ive 3; Mismatches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80.6%; Score 348; DB 2;
82.5%; Pred. No. 4.3e-25;
ive 3; Mismatches 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, D88585; BAA21556.1; -. GO, GO:0004872; F:receptor activity; IEA. InterPro; IPR003599; Ig. InterPro; IPR007110; Ig-like. InterPro; IPR003066; Ig-MHC. SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   018984;
01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequ
01-JAN-2004 (TrEMBLrel. 26, Last anno
Hepatitis A virus receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG MHC; UNKNOWN 1.
                                                                                                                                                                                                                                                                                                                                                                                                SMART; SM00409; IG; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          351 NNÓTÓLSPEHSPOMVNTTEG 370
                                                                                                    MEDLINE=97015129; PubMed=8861957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9534;
NCBI_TaxID=9534;
                                                                           IISSUE=Kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   018984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
018984
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                         MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Altausner R.D., Collins F.S., Wagner L., Shemen C.M., Schuler G.D.,
Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
A Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A stapleton M., Soares M.B., Bonaldo M.F., Carnhon G.M., Hong L.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McKennan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
A Richards S., Worley K.C., Hale S., Garden B.J., Lu X., Gibbs R.A.,
A Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Halton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Shevchenko Y., Boutfard G.G.,
Mhiting M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,
A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Jones S.J., Marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A marra M.A.,
A ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       215 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MPLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HAVCr-1 protein precursor.
Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ebert L., Schick M., Neubert P., Schatten R., Henze S., Korn B.; Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 432; DB 2; Length 364; 100.0%; Pred. No. 3e-33; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.;
Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN 1.
SEQUENCE 364 AA; 39249 MW; AA67C7DC7FAC81F1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       451 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    275 NNNOTOLFLEHSLLTANTIKG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NNNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cercopithecinae, Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; BC013325; AAH13325.1; -. EMBL; CR457114; CAG33395.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genew; HGNC:17866; HAVCR1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and mouse cDNA sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMART; SM00409; IG; 1.
sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                             NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q95144
Q95144;
```

ö

0; Gaps

RESULT 3

셤 ò

ò

ö

ö

```
J. Virol, 72:6218-6222(1998).
EMBL; AF043448; AAC39773.1; -.
GO; GO:0004872; F:receptor activity; IEA.
                                                             InterPro; IPR003599; IG.
InterPro; IPR007110; IG-like.
InterPro; IPR003006; IG_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9534;
                                                                                                                                                                                                            Receptor.
                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          046597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
046597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
046598
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      309 PLPMQDHEPVATSPSSAQPAETHPVTLLGATRTQPTSSPLYSYTTDGSDTVTESSDGLWN 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=98285791; PubMed=9621093; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.; "Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4."; J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-98285791; PubMed-9621093;
Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Feigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Folymorphisms of the hepatitis A virus cellular receptor 1 in African
green monkey kidney cells result in antigenic variants that do not
react with protective monoclonal antibody 190/4.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 PLPRQNHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                       Cercopithecus aethiops (Green monkey) (Grivet).

Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;

Cercopithecinae; Cercopithecus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cercopithecus aethiops (Green monkey) (Grivet).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77.5%; Score 335; DB 2; Length 469; 80.0%; Pred. No. 7.9e-24; Live 4; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       469 AA; 50561 MW; 27E386F47948F528 CRC64;
                                                                                                                                                                                                                            05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hepatitis A virus cellular receptor 1 short form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hepatitis A virus cellular receptor I short form
                                                                                                                                                                                      469 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   473 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360 NNOTOLSPEHSPOMVNTTEG 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   369 NNOTOLSPEHSPOMVNTTEG 388
                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 NNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cercopithecinae; Cercopithecus.
                          62 NNOTOLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 80.0
nes 64; Conservative
                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                         07JJ48;
                                                                                                                                                                                      Q7JJ48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     073347
                                                                                                                                         RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                       20110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
00110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              073347
                          ሯ
                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 PLPMQDHEPVATSPSSAQPAETHPVTLLGATRTQPTSSPLYSYTTDGSDTVTESSDGLWN 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINES 98285791; PubMed=9621093;
MEDLINES 98285791; PubMed=9621093;
Peigelstock D., Thompson P., Mattoo P., Kaplan G.G.;
Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey Kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4.";
J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                            2 PLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 PLPRONHEPVATSPSSPOPAETHPTTLOGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota, Metazoa, Chordata, Craniata, Verrebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                 Query Match 77.5%; Score 335; DB 2; Length 473; Best Local Similarity 80.0%; Pred. No. 8e-24; Matches 64; Conservative 4; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 474;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77.5%; Score 335; DB 2; Length 47
80.0%; Pred. No. 8e-24;
trive 4; Mismatches 12; Indel8
                                                                                                                    473 AA; 50973 MW; CD15EF5EE79C8013 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           474 AA; 51088 MW; 472DF987CA220524 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cercopithecus aethiops (Green monkey) (Grivet)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                474 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF043447; AAC39772.1; -. GO: 0004872; F: receptor activity; IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR003006; Ig_MHC.
SMART; SMO409; IG; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
SMART; SM00409; IG; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373 NNOTOLSPEHSPOMVNTTEG 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374 NNOTOLSPEHSPOMVNTTEG 393
                                                                                                                                                                                                                                                                                                                                                                                                           62 NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 NNOTOLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UnterPro; IPR003599; IG.
InterPro; IPR007110; IG-like.
InterPro; IPR003006; IG_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 80.0 les 64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
```

```
208 TVT-SSEEAWINHTVRIPLRKP--QRNPTKG 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   153 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51 TVTESSDGLWNNNQTQLFLEHSLLTANTTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AF035963; AAC53546.1; -. EMBL; BC061820; AAH61820.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS50835; IG LIKE; 1.
SEQUENCE 307 AA; 33963 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                      and mouse cDNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. TISSUE=Prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q71.9D0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           071900
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318 PLPMODHEPVATSPSSAQPAETHPVTLLGATRTQPTSSPLYSYTTDGSDTVTESSDGLWN 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINES 9828791; PubMed=9621093; MEDLINES 9828791; PubMed=9621093; Peigolstock D., Thompson P., Mattoo P., Kaplan G.G.; Polymorphisms of the hepatitis A virus cellular receptor 1 in African green monkey kidney cells result in antigenic variants that do not react with protective monoclonal antibody 190/4."; J. Virol. 72:6218-6222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Kidney injury molecule-1 (KIM-1), a putative epithelial cell adhesion molecule containing a novel immunoglobulin domain, is up-regulated in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 PLPRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUB-Prostate;
MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
                                                                                                                                                                      Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=Sprague-Dawley; TISSUE=Kidney;
MEDLINE=98129827; PubMed=9461608; DOI=10.1074/jbc.273.7.4135;
Ichimura T., Bonventre J.V., Bailly V., Wei H., Hession C.A.,
Cate R.L., Sanicola M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   478 AA; 51501 MW; 3A919655C752FF60 CRC64;
                                                                        01-JUN-1998 (TrEMBLrel. 06, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update) Hepatitis A virus cellular receptor 1 long form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 335; DB 2;
Pred. No. 8.1e-24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   307 AA
478 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF043449; AAC39774.1; -- GO: 0004872; F: receptor activity; IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kidney injury molecule-1 (KIM-1 protein)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               renal cells after injury.";
J. Biol. Chem. 273:4135-4142(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NNQTQLSPEHSPOMVNTTEG 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NNQTQLFLEHSLLTANTTKG 81
                                                                                                                                                                                                                                               Cercopithecinae; Cercopithecus.
NCBI_TaxID=9534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR003599; IG.
InterPro; IPR007110; IG-like.
InterPro; IPR0306; Ig_MHC.
SMART; SM0409; IG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77.5%;
80.0%;
                                            01-JUN-1998 (TrEMBLrel. 06, 01-JUN-1998 (TrEMBLrel. 06, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 80.0
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10116;
                                                                                                                                                    Name=HAVcr-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=KIM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                054947
054947;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   datches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
1054947
1064947
1064947
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
10749
107
```

ð g ઠે a

```
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M. Soares M.B., Bonaldo M.F., Carninci P., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McKwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Hulyk S.W.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.W., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155 RSTHVPTSTRVSTSTPTPEQTQTHKPEITTFYAHETT-----AEVTETPSYT-PADWNG 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUB=Colon;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
MISCHINESER R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Mang J., Haish F.,
Diatchenko L., Marusina K., Farmer R. Mubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 RONHEDVAT -- SPSSPOPAET -- -- -- HPTTLOGAIRREPTSSPLYSYTTDGND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Watanabe K., Kumagai A., Itakura S., Yamazaki M., Tashiro H., Ota T., Suziki Y., Obayashi M., Nishi T., Shibahara T., Tanaka T., Nakamura Y., Isogai T., Sugano S., Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Hypothetical protein FLJ22174 (Hypothetical protein FLJ21380).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20.6%; Score 89; DB 2; Length 307; 34.1%; Pred. No. 1.7; ive 9; Mismatches 27; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strausberg R.; Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    736D1DD1F1549760 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
```

ö

0; Gaps

33; Indels

9; Mismatches

```
22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=44689;
                                                                                                                                                                                                                                     62 NNQT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=AX4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q8SSZ4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q8SSZ4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
Q8SSZ4
                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Vilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Mulling M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                    Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Colon;
Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T., Tanaka T., Nakamura Y., Isogai T., Sugano S.; Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anopheles gambiae str. PEST.
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.
NCBI_TaxID=180454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anopheles Génome Sequencing Consortium;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 88; DB 2; Length 153;
Pred. No. 0.91;
6; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 LPRONHEPVATSPSSPOPAE----THPTTL-----OGAIRREPTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322879 MW; 3C7B3D441CE8C839 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg R., Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein.
SEQUENCE 153 AA; 16678 MW; 11CA3A27EDCE711F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AAABOL006990; EAA13969.2; --
GO; GO:0016020; C:membrane; IEA.
GO; GO:000151; F:receptor activity; IEA.
InterPro; IPR006770; OGF_recept.
Pfan; PF04680; OGF_recept.
NON_TER 3150 3150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 3150 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AK025827; BAB15250.1; -. EMBL; BC022217; AAH22217.1; -. EMBL; AK025033; BAB15054.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-2004 (TrEMBLrel. 26, L
ENSANGP00000004655 (Fragment)
Name=ENSANGG0000003651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAR-2004 (TrEMBLrel. 26, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            preliminary data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3150 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Colon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-PEST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7PMD5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
Q7PMD5
AC Q7PMD
AC Q7PMD
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
               RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RAPARA RA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

Score 86; DB 2; Length 3150; Pred. No. 57;

19.9%;

Best Local Similarity

Query Match

```
1293 PEPSTTPGITRTSPTRPTSTESTDTTMSSASTPEPTTTPDTTRTTPTRPTSTESTDTTMS 1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461 PTPTNSSTPTPTNSSTPTP--TNSSTPTNSSDPSSASSFNSSSFNSTSSSNSTISPS 518
     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=22092622; PubMed=12097910; DOI=10.1038/nature00847; Gloeckner G., Eichinger L., Szafranski K., Pachebat J., Dear P., Lehmann R., Baumgart C., Parra G., April J.F., Guigo R., Kumpf K., Tungal B., Cox E., Quail M.A., Platzer M., Rosenthal A., Noegel A.A.; "Sequence and analysis of chromosome 2 of Dictyostellum discoideum.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=AX4;
MEDLINES-22092622; PubMed=12097910; DOI=10.1038/nature00847;
MEDLINES-22095222; PubMed=12097910; DOI=10.1038/nature00847;
Gloeckner G., Richinger L., Szafranski K., Pachebat J., Dear P.,
Lehmann R., Baumgart C., Parra G., April J.P., Guigo R., Kumpf K.,
Tunggal B., Cox E., Quail M.A., Platzer M., Rosenthal A., Noegel A.A.;
"Sequence and analysis of chromosome 2 of Dictyostelium discoideum.";
Nature 418:79-85(2002).
2 PLPRONHEDVATSPSSPQPAETHPTTLQGAIRREPISSPLYSYTTDGNDTVTESSDGLWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 PLPRONHEPVAISPSSPOPAETHPTTLQGAIRREPT----SSPLYSYTTDGNDTVTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 19.2%; Score 83; DB 2; Length 642; Local Similarity 29.5%; Pred. No. 16; es 26; Conservative 16; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Baumgart C.;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; AC116979; AAS38767.1; -
SEQUENCE 642 AA; 66631 MW; C4837BCCEF4B962A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similar to Leishmania major. Ppg3.
Dictyostelium discoideum (Slime mold).
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein.
Dictyostelium discoideum (Slime mold).
Eukaryota, Mycetozoa, Dictyostellida, Dictyostellum.
                                                                                                                                                                                                                                                                                                                                                                 05-UUL-2004 (TrEMBLrel. 27, Created)
05-UUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                     642 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                684 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          519 SSSL--NNSTSSFNSTSLSNSTSSSNST 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56 SDGLWNNNQTQLF----LEHSLLTANTT 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Sequence and analysis on Nature 418:79-85(2002).
                                                                                                                                                                      1353 SAST 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN=AX4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=44689;
```

```
clones."
                                                                                                                                              RESULT 15
                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  498 PSENILPPGTLPSNPAPID-----VRRSPVASS-HFYNTNQPTLVTDNDQENQKTL 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183 PIPQYPSLNDSSSNGNGTPALSSPSSTTPHPTTPHPTT-----PTSTPNQRFQSNGS 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 PLPRQ-----NHEPVATSPSS--PQPAETHPTTLQGAIRREPTSSPLYSYTTDGN 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 PRONHEPVATSPSSPQPAETHPTTLQGAIRREPTSSPLYSYTTDGNDTVTESSD-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29;
                                                                                                                                                                                                                                                                                                                                                                                                                Length 684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 965;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genome sequence of the nematode C.elegans: A platform for investigating biology."; Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                             Submitted (WAR-2003) to the EMBL/GenBank/DDBJ databases. EMBL; AC116330; AAL96724.2; -.
HSSP; 0.13952; IN1J.
GO; GO:0003677; F:DNA binding; IEA.
InterPro; IPR003958; ERFA NFYB domain.
InterPro; IPR003958; ERFA NFYB domain.
InterPro; IPR003072; Histone-fold.
InterPro; IPR007124; Hist_TAP.
Hypothetical protein.
PRO808; CBFD NFYB HRF; 1.
Hypothetical protein.
EQUENCE 684 AA; 78068 MW; C47DD981569820AF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McMurray A.A.;
Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; Z73976; CAA98287.2; -.
PIR; T24643; T24643.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hypothetical protein. SEQUENCE 965 AA; 106620 MW; D7B2E8703D897ABA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                            19.1%; Score 82.5; DB 2;
29.8%; Pred. No. 19;
tive 10; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18.4%; Score 79.5; DB 2; 26.1%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   235 SSF-----2NOLONHLENKL 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 DTVTESSDGLWNNNQTQLFLEHSL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WormBase; WBGene00011572; T07C12.8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WormPep; T07C12.8; CE28954.
GO; GO:0016020; C:membrane; IEA.
InterPro; IPR000998; MAM.
Pfam; PF00629; MAM; 1.
SMART; SM00137; MAM; 1.
PROSITE; PS50060; MAM 2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=99069613; PubMed=9851916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hypothetical protein T07C12.8.
ORFNames=T07C12.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1996 (TrEMBLrel. 01,
01-DEC-2001 (TrEMBLrel. 19,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN=Bristol N2;
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=Bristol N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                              Baumgart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        022286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
022286
10 022286
10 01-06
01 01-07
01 01-07
01 01-07
02 02228
03 02228
04 01-07
01 01-07
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 02228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0228
05 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
90 58 ------CLANRANCY LEMBELLANT 78

DESIDE TO OPERFOR THE THE THE THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL THE TOTAL
```

```
DR InterPro; IPR008271; Ser thr pkin_AS.

DR PRINTS; PR01218; PSTLEXTENSIN.

DR PROSITE; PS001001; PROTEIN KINASE ATP; 1.

DR PROSITE; PS00101; PROTEIN KINASE ATP; 1.

DR PROSITE; PS00101; PROTEIN KINASE TY; 1.

DR PROSITE; PS00101; PROTEIN KINASE TY; 1.

KW ATP-binding; Kinase; Serine/threonine-protein kinase; Transferase.

SQ SEQUENCE 681 AA; 72389 MW; F64DAA18470E73F9 CRC64;

Query Match

Query Match

Best Local Similarity 29.8%; Pred. NO. 41;

Matches 17; Conservative 11; Mismatches 29; Indels 0; Gaps 0;
```

Search completed: June 29, 2005, 09:01:42 Job time : 34.4637 secs

දු ද

THIS PACE BLANK USPO)